

U.S. ARMY CORPS OF ENGINEERS
CIVIL WORKS PROGRAM

CONGRESSIONAL SUBMISSION
FISCAL YEAR 2003

PACIFIC OCEAN DIVISION

*Budgetary information will not be released
outside the Department of the Army until
4 FEBRUARY 2002*

DEPARTMENT OF THE ARMY
FISCAL YEAR 2003

PACIFIC OCEAN DIVISION

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DEPARTMENT OF THE ARMY
FISCAL YEAR 2003

SUMMARY PACIFIC OCEAN DIVISION

	<u>FY 2002</u> <u>Allocations</u> \$	<u>FY 2003</u> <u>Request</u> \$	<u>Increase</u> <u>or</u> <u>Decrease</u> \$
<u>General Investigations</u>			
Survey	2,819,000	2,031,000	(788,000)
Preconstruction Engineering and Design	568,000	688,000	120,000
Subtotal General Investigations	3,387,000	2,719,000	(688,000)
<u>Construction, General</u>			
Construction	14,469,000	25,484,000	11,015,000
<u>Operation and Maintenance, General</u>			
Project Operation	2,569,000	3,055,000	486,000
Project Maintenance	6,851,000	7,460,000	609,000
Subtotal Operation and Maintenance	9,420,000	10,515,000	1,095,000
	=====	=====	=====
GRAND TOTAL, PACIFIC OCEAN DIVISION	27,276,000	38,718,000	11,442,000

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
1. SURVEYS - NEW					
1a. Navigation Studies: None					
1b. Flood Damage Prevention Studies: None.					
1c. Shoreline Protection Studies: None.					
1d. Special Studies: None.					
1e. Comprehensive Studies: None.					
1f. Project Review Studies: None.					
2. SURVEYS - CONTINUING					
2a. Navigation Studies: The amount of \$1,396,000 is requested in Fiscal Year 2003 for twenty feasibility studies.					

Alaska District

Anchor Point Harbor, AK	901,000	270,000	31,000	50,000	550,000
Alaska District					

Anchor Point is a community with a population of 1,700 and is located 250 miles Southwest of Anchorage on the Kenai Peninsula. The economy is based on commercial fishing and tourism. The area is one of the most productive commercial and sport fishing locations on the Kenai Peninsula. Halibut and salmon are the target species. Anchor Point is used extensively as a staging area during May and June. The existing unimproved launch sites at Anchor Point are crowded and dangerous. Commercial and sport fishermen launch their boats directly into the surf or in the Anchor River. This creates unsafe conditions and there are numerous cases of vehicles being swamped by the waves and tide. Many commercial and charter boats must launch at Homer, 15 miles to the southeast, and then travel to Anchor Point to fish. Several lives have been lost because of the inability of rescue vessels to respond expeditiously to boats in distress. Benefits of a small boat harbor

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
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and launch facility are about \$1 million annually and would accrue to the commercial fleet, the charter fleet, and to the recreational and subsistence fleets. There would also be Harbor of Refuge benefits. The commercial and charter fleets would benefit from reduced travel time to the fishing grounds. The charter and recreational/subsistence fleets would also benefit from reduced launching time, and reduced damages during launching. The citizens of Anchor Point and the State understand the cost sharing provisions of the Water Resources Development Act of 1986.

The community of Anchor Point strongly supports harbor development as indicated in their June 1998 letter where they stated a willingness to share equally in the feasibility phase cost that may follow the reconnaissance study. The reconnaissance report was completed on January 26, 1995 but the City of Anchor Point was not able to enter into an agreement because it was not incorporated. The Kenai Peninsula Borough would be the likely sponsor for that phase while Anchor Point is pursuing incorporation. The Alaska Department of Transportation and Public Facilities has budgeted funds for the local share of the feasibility study and will furnish them to the Borough.

Fiscal Year 2002 funds are being used for the reconnaissance phase and to initiate the feasibility study, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. Fiscal Year 2003 funds will be used to continue the feasibility study. The preliminary estimated cost of the feasibility phase is \$1,200,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests.

Total Estimated Study Cost	\$1,501,000
Reconnaissance Phase (Federal)	301,000
Feasibility Phase (Federal)	600,000
Feasibility Phase (Local)	600,000

The reconnaissance phase is scheduled for completion in August 2002. Based on funding availability, completion of the feasibility study is scheduled for June 2008.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Anchorage Harbor Deepening, AK Alaska District	1,263,000	188,000	315,000	50,000	710,000

Anchorage Harbor is the primary deep water port for south-central Alaska, which contains two-thirds of the State's population, and is the hub of economic activity for the state. A sharp increase in the number and size of petroleum tankers serving the military and commercial tank farm operators delivering their cargo to Anchorage has occurred in recent years since the Department of Defense pipeline from Whittier ceased operation. Fuel is also delivered through the port to supply needs resulting from a sharp increase in air cargo activity at the Anchorage International Airport. There is increasing interest in the Port of Anchorage, with its many nearby attractions, as a cruise ship destination. Anchorage, as Alaska's largest metropolitan city, has certain inherent intrastate, interstate, national and international commerce responsibilities and activities. Nearly 80% of the goods for 90% of Alaska's population cross the docks at the Port of Anchorage. The Port of Anchorage is dredged annually to a depth of 35 feet below mean lower low water level by the Corps of Engineers. Significant delays have occurred when deeper draft vessels were unable to dock at the port because of limited available water depths. Some larger petroleum tankers arrive at high tide and quickly off load some of their cargo to reduce draft. The Knik Arm Shoal (Cook Inlet) navigation channel was completed in September 2000, allowing deeper draft and larger ships to call at the port with greater flexibility regarding tides. Deeper draft capability is needed in the dock approach channels and around the terminals to accommodate the vessel traffic. Transportation costs could be significantly reduced if the deeper vessels could call at the Port of Anchorage. Annual cargo throughput was about 3.7 million tons in 1999 and has increased about 8 percent per year since 1987.

The Municipality of Anchorage intends to be the local sponsor as indicated in their June 1998 letter where they stated a willingness to share equally in the feasibility phase costs. An evaluation of potential benefits and costs for deepening the approaches to the Anchorage Port will be completed during the study. Numerical and/or physical models will be used to insure maintenance requirements are minimized. Several ships serving the Port of Anchorage are scheduled for replacement within the next 10 years; thus the feasibility study findings will be critical for decisions on the ship design to match the harbor depth while providing adequate safety clearance under the vessel.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
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Fiscal Year 2002 funds are being used to negotiate and initiate feasibility phase studies, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. Funds for Fiscal Year 2003 will be used to continue the feasibility study. The preliminary estimated cost of the feasibility phase is \$2,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$2,263,000
Reconnaissance Phase (Federal)	263,000
Feasibility Phase (Federal)	1,000,000
Feasibility Phase (Local)	1,000,000

The reconnaissance phase will be completed in August 2002. Based on funding availability, completion of the feasibility study is scheduled for June 2008.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Aniak Harbor, AK Alaska District	500,000	0	63,000	50,000	387,000

Aniak is on the Kuskokwim River in southwestern Alaska. The city is a service and transportation center for other communities on the river and a transfer point for the commercial fishing industry. Access is by air and water, as no road network exists. The Kuskokwim River often provides the only means of transportation during severe weather conditions when small aircraft cannot fly. The river is also used extensively for commercial and subsistence fishing activities as well as shipment of bulk commodities such as fuel and building materials. Recent expansion of the airport facilities and growth of the community make a harbor facility even more urgent. Studies will concentrate on evaluating navigation improvements in the area. The city is willing to cost-share the feasibility study and project with funding assistance from the State of Alaska.

The reconnaissance phase of the study is being initiated with FY 2002 funds. The funds requested for Fiscal Year 2003 will be used to complete the reconnaissance phase and initiate the feasibility study, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. The preliminary estimated cost of the feasibility phase is \$800,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. All of the non-Federal share may be in-kind services. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$900,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	400,000
Feasibility Phase (non-Federal)	400,000

The reconnaissance phase is scheduled for completion in July 2003. The feasibility study is scheduled for completion in October 2007 based on funding availability.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
DeLong Mountain Regional Port, AK Alaska District	4,200,000	2,554,000	315,000	150,000	1,181,000

The DeLong Mountain Regional Port is located in northwestern Alaska about 650 miles northwest of Anchorage. It currently serves the world class Red Dog zinc mining operation and could serve as a regional hub for distribution of fuel to several communities in the region and also a future coal mining operation. The Alaska Industrial Development and Export Authority (AIDEA) and the Northwest Arctic Borough are interested in expanding the terminal for additional ore capacity, general use by communities in this area, and future potential shipment of coal. Expansion of the port could reduce lightering costs, which are approximately \$20 million per year. Shallow draft barges currently carry the ore concentrate to large ore carriers that anchor several miles offshore.

Navigation improvements that are desired include dredging a deep draft channel and maneuvering area for a new direct load facility connected to shore by a trestle. The estimated dredging cost is \$30 to \$50 million. Potential benefits from the navigation improvements include significant reduction in transportation costs for zinc and lead concentrate, reduced costs of dry goods arriving at the port, savings in fuel transportation costs to communities in the region, and the enhanced feasibility of coal export and other metal mines in the region. AIDEA, the project sponsor, has listed this project as a high priority.

Fiscal Year 2003 funds are being used to continue work on the feasibility study. The estimated cost of the feasibility phase is \$8,400,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$8,400,000	
Reconnaissance Phase (Federal)	N/A	(Prepared under Coastal Navigation, AK parent study)
Feasibility Phase (Federal)	4,200,000	
Feasibility Phase (Local)	4,200,000	

The reconnaissance phase was prepared under the Coastal Navigation Improvements Study and was completed in January 2000. Based on funding availability, completion of the feasibility study is scheduled for June 2008.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Ketchikan Navigation Improvements, AK Alaska District	607,000	60,000	63,000	50,000	434,000

Ketchikan is located in southeastern Alaska, approximately 600 miles from Anchorage. Ketchikan is the major distribution and transportation center for the southern half of southeastern Alaska. The borough population is about 15,000 persons. The Ketchikan Gateway Borough has five public harbors. The Bar Point Harbor, Thomas Basin, and City Float harbor are located in the city of Ketchikan. These three harbors account for approximately 90 percent of the total harbor space, and have a total design capacity of 812 permanent moorage spaces. In addition to permanent moorage, space is available for approximately 95 transient vessels. The other two public harbors, Knudson Cove, 19 km (12 miles) north of Ketchikan, and Hole-in-the-Wall, 11 km (7 miles) south of Ketchikan, have a total design capacity of 71 spaces. All five harbors combined have 978 permanent and transient spaces available. In addition, the Mountain Point breakwater and launch ramp allows trailered vessels to be launched at a site 10 km (6 miles) south of Ketchikan. There are another 200 moorage spaces located in various private harbors within the Ketchikan/Saxman area. Many of these harbor facilities are in close proximity to large cruise ship operations. Conflicts between the two uses are frequent. This study will evaluate the damages due to overcrowding, cost of delays, and high operating costs for commercial fishing vessels and cruise ships in the Ketchikan area. The wait list for the Ketchikan area has increased to 300 vessels. This study will identify the problems and opportunities for commercial navigation in Ketchikan and determine whether feasibility studies of navigation improvements in Ketchikan are warranted. The Ketchikan Gateway Borough is the likely sponsor. They are familiar with the cost sharing requirements for the feasibility study.

Fiscal Year 2002 funding are being used to complete the reconnaissance report and initiate the feasibility study, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. Funding in Fiscal Year 2003 will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is \$1,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing follows:

Total Estimated Study Cost	\$1,107,000
Reconnaissance Phase	107,000
Feasibility Phase (Federal)	500,000
Feasibility Phase (Local)	500,000

The reconnaissance phase is scheduled for completion in July 2002. Based on funding availability, completion of the feasibility study is scheduled for June 2007.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Kotzebue Harbor, AK Alaska District	529,000	92,000	63,000	50,000	324,000

The City of Kotzebue is located on the northwest coast of the Baldwin Peninsula in Kotzebue Sound on the Chukchi Sea above the Arctic Circle. The city is 549 miles northeast of Anchorage and can be reached only by air and by sea. Nearly all supplies arrive by water between June and September. These shipments are transferred from ocean going vessels to shallow draft lightering barges for the 13 mile trip to port. Barges drawing no more than 7 feet of water are used because the tremendous volumes of sediment deposited in the Kotzebue Sound frequently create shoaling problems. A Reconnaissance report was completed in 1981 under the authority of Section 205 of the 1948 Flood Control Act, as amended, which concluded that a navigation channel could be constructed to reduce shipping costs. Today Kotzebue is the service and transportation hub for all villages in the northwest region. Commercial fishing of chum salmon and trout, and processing at Kotzebue Sound Area Fisheries provide seasonal employment and 140 resident have commercial fishing permits. Most residents rely on subsistence to supplement income. Kotzebue is the center for subsistence salmon and sheefish fishing during the summer. Small craft from villages along the Chukchi Sea and upriver on the Kobuk and Noatak Rivers come to Kotzebue for fishing. The State of Alaska is improving shore protection along Shore Avenue, which will remove much of the available beach area used for vessel loading, staging, and itinerant parking. The City of Kotzebue is interested in developing alternative locations to harbor and service these small vessels.

Fiscal Year 2002 funds are being used to complete the reconnaissance phase and initiate Feasibility, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. Fiscal Year 2003 funds will be used to continue the feasibility study including engineering, economic and environmental analyses of needed navigation improvements. The preliminary estimate cost of the feasibility phase is \$800,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$929,000
Reconnaissance Phase (Federal)	129,000
Feasibility Phase (Federal)	400,000
Feasibility Phase (non-Federal)	400,000

The reconnaissance phase is scheduled for completion in June 2002. Based on funding availability, completion of the feasibility study is scheduled for June 2006.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Little Diomede, AK Alaska District	902,000	66,000	94,000	115,000	627,000

The City of Diomede lies on the west coast of Little Diomede Island, 2.5 miles from Big Diomede Island, Russia. The two Diomede Islands lie in the center of the Bering Straits, 135 miles northwest of Nome. Access to Diomede is limited to weekly helicopter service during the summer open water periods and intermittent fixed wing aircraft during the winter, which is dependent upon construction of an ice runway. Both types of service are very weather dependent. Service is also very limited in the size and type of goods that can be shipped. Diomede has no protected harbor, and regular freight barges have ceased delivering cargo because of the high risk of barge damage and weather delays. Some independent barge operators will go to Diomede for premium fees. New construction, equipment, major repairs to infrastructure, and even replacement of household appliances are being impacted and delayed because of increased transportation costs. During some winters, an ice runway can be built on the sea ice for fixed wing aircraft, which can deliver some larger items, but at exorbitant costs. A harbor would greatly reduce the cost of goods and increase access to the village. Potential cost share sponsors for the feasibility study include the City of Diomede, Kawerak, Inc. (regional non-profit tribal corporation), and the State of Alaska.

Fiscal Year 2002 funds are being used to complete the reconnaissance study and initiate feasibility, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. Funds requested for Fiscal Year 2003 will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is \$1,600,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,702,000
Reconnaissance Phase (Federal)	102,000
Feasibility Phase (Federal)	800,000
Feasibility Phase (non-Federal)	800,000

The reconnaissance phase is scheduled for completion in July 2002. Based on funding availability, the completion of the feasibility study is scheduled for August 2007.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Mekoryuk Harbor, AK Alaska District	600,000	67,000	63,000	50,000	420,000

Mekoryuk is a small community on Nunivak Island, which is located 30 miles off the western coast of Alaska in the Bering Sea. Nunivak Island has numerous coves which are naturally deep, unlike most of western Alaska, which is characterized by sandy, shallow shoals along the coastline. The Corps of Engineers constructed a 510-foot breakwater in 1986. The breakwater protects an inter-tidal moorage area of 1.2 acres. There are now 55 boats which want to use the harbor, but there is not adequate space or depth. The existing harbor is inter-tidal and requires a plus tide of 8 feet before boats can enter or leave, resulting in delays of up to six hours. This reduces the time available for commercial and subsistence fishing. In addition, the breakwater does not provide protection against storm waves that come from the southeast to south.

Also, barges that deliver fuel and cargo are often damaged because the bay is strewn with boulders of varying size. The proposed study will consider benefits and costs for expansion or development of a new small boat harbor at Mekoryuk, along with improvements to the barge landing site.

The City of Mekoryuk is the potential sponsor and has listed this project as a high priority. They are familiar with the cost sharing requirements for the feasibility study. The Native Village of Mekoryuk and Nunivak Island Mekoryuk Alaska (NIMA) Native Corporation support this project.

Fiscal Year 2002 funds are being used to complete the reconnaissance phase and initiate the feasibility phase, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. Fiscal Year 2003 funds will be used to continue the feasibility study. The preliminary estimated cost of the feasibility phase is \$1,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing follows:

Total Estimated Study Cost	\$1,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	500,000
Feasibility Phase (local)	500,000

The reconnaissance phase is scheduled for completion in April 2002. Based on funding availability, completion of the feasibility study is scheduled for September 2007.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Port Lions Harbor Alaska District	435,000	187,000	94,000	50,000	104,000

Port Lions Harbor is in Settler Cove, adjacent to the southeast coast of Kodiak Island, about 19 air miles west-northwest of the city of Kodiak, Alaska. The Corps of Engineers constructed a breakwater and entrance channel in 1981 to provide safe anchorage for the local fleet of fishing boats and transient vessels. The project consists of a 5-acre mooring basin behind a 600-foot breakwater and 170-foot stub breakwater. A winter storm in November 1981 severely damaged the main breakwater just 4 months after completion. Reconstruction in 1983 added 125 feet to the length of the main breakwater and strengthened it. The harbor design is for 125 vessels, but only about 56 vessels use the harbor, as the remaining portion still experiences damage during severe storms, and it is unsafe. Additional breakwaters are needed to provide adequate wave protection for the moorage area and to reduce damages to the vessels and the mooring system. Also, larger vessels with deeper drafts desire use of the harbor but must travel to other harbors, which greatly increases their operating costs. If the harbor had sufficient protection, commercial fishing vessels would occupy the majority of mooring berths not now usable. The Alaska Department of Transportation & Public Facilities is the local sponsor and signed the feasibility cost sharing agreement in January 2001.

Fiscal Year 2002 funds are being used to continue the feasibility phase of the study. Fiscal Year 2003 funds will be used to continue the feasibility study. The preliminary estimated cost of the feasibility phase is \$600,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$735,000
Reconnaissance Phase (Federal)	135,000
Feasibility Phase (Federal)	300,000
Feasibility Phase (Local)	300,000

Based on funding availability, completion of the feasibility study is scheduled for June 2004.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Saint George Navigation Improvements, AK Alaska District	674,000	80,000	94,000	75,000	425,000

The City of Saint George is located on Saint George Island the second largest of the Pribilof Islands. The island is located in the middle of the Bering Sea, in the center of extensive bottom fish and crab fisheries. The harbor configuration was designed and built by the city. Previous Federal work on this harbor consisted of dredging the entrance and maneuvering channel under Section 107 authority in which project depth was not fully achieved. Following this work Congress authorized the entrance channel to be dredged to a 20-foot depth. Dredging the entrance channel of rock pinnacles is scheduled to be awarded with the Saint Paul Phase II contract in FY 2003.

Large waves are entering the entrance and inner harbor area making ingress/egress into the harbor almost impossible during moderate wave conditions. Harbor users are reluctant to enter the harbor or proceed with off loading operations. The feasibility study will look at ways to reduce wave action in the inner harbor but more importantly create a safe entrance channel wave environment into the harbor. This may result in a different harbor configuration or the possibility of developing a harbor at a different location.

Fiscal Year 2002 funds are being used to complete the reconnaissance phase. Funds requested for Fiscal Year 2003 will be used to initiate the feasibility study, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. The preliminary estimated cost of the feasibility phase is \$1,000,000, which is to be shared on a 50-50 basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,174,000
Reconnaissance Phase (Federal)	174,000
Feasibility Phase (Federal)	500,000
Initial Non-Federal Share	500,000

The reconnaissance phase will be completed in February 2003. Based on funding availability, completion of the feasibility study is scheduled for September 2007.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Sitka Harbors, AK Alaska District	725,000	65,000	126,000	50,000	484,000

The City of Sitka, with a population of approximately 8,100, is located on the western shore of Baranof Island in Southeast Alaska, and is one of Alaska's principal commercial fishing ports. The city's public harbors host hundreds of transient fishing vessels from Southeast Alaska and the Pacific Northwest at any given time during the fishing season. Thomsen Harbor, which serves many of the permanent and transient fishers at Sitka, is protected by the channel rock breakwaters, which were completed as a Federal project in 1995. Gaps in these breakwaters, for water circulation, allow some long-period swells, originating in the Gulf of Alaska, causing extensive maintenance problems in the harbor. The swell creates excessive motion of the vessels and facilities, resulting in frequent and expensive maintenance and greatly reducing the useful life of the float system. Improved wave protection for Thomsen Harbor is desired to reduce the the current level of maintenance. Extension of the western breakwater to reduce the opening of the gaps is one possible alternative plan. The city of Sitka is the local sponsor and is aware of the cost-sharing provisions of WRDA 1986. The reconnaissance report was completed in November 2001.

Fiscal Year 2002 funds are being used to complete the reconnaissance phase. Fiscal year 2003 funds will be used to initiate the feasibility study, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. The preliminary estimated cost of the feasibility phase is \$1,200,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,325,000
Reconnaissance Phase	125,000
Feasibility Phase (Federal)	600,000
Feasibility Phase (Local)	600,000

The reconnaissance phase is scheduled for completion in November 2002. Based on funding availability, completion of the feasibility study is scheduled for August 2007.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Skagway Harbor, AK Alaska District	530,000	116,000	87,000	45,000	282,000

Skagway is a small community located at the northernmost end of Taiya Inlet. The community is 90 miles northeast of Juneau. Local interests desire the expansion of the Skagway Small Boat Harbor. The Corps of Engineers dredged the original harbor in 1945. The entrance channel and the harbor were dredged to a depth of -8 feet MLLW with a one acre basin. In 1958 and 1959 the City of Skagway improved the harbor by constructing a rubblemound breakwater and expanding the basin by 2.5 acres and increasing the depth to -12 feet MLLW. The present harbor has moorage for about 140 small boats with a waiting list of over 130 vessels. Over crowding of the harbor is common during the commercial fishing and tourist season. Commercial fishing, tugs, and charter vessels have increased in length and draft in the past 40. Tugs must leave the harbor early and delay return when assisting arriving or departing cruise ships or ore ships in order to work around tides. Tugs could be stuck in the harbor during emergency situation with cruise or ore ships, or other commercial vessels needing assistance. Tour boat traffic landings have doubled in the last year from 80 to 140 vessels. The harbor is over crowded during the summer months, and vessels that are turned away. Cruise ships visits range from 350 to 450 vessels a year. The study will consider the benefits and costs for deepening the entrance channel and expanding the harbor to accommodate the current and projected fleet and tugs. The City of Skagway is the likely sponsor and has listed this project as a high priority. They are familiar with the cost sharing requirements for the feasibility study. The reconnaissance report was completed in August 2000.

Fiscal Year 2002 funds are being used to complete the reconnaissance phase and initiate feasibility studies, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. Fiscal Year 2003 funds will be used to continue the feasibility study. The preliminary estimated cost of the feasibility phase is \$800,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$930,000
Reconnaissance Phase (Federal)	130,000
Feasibility Phase (Federal)	400,000
Feasibility Phase (Local)	400,000

The reconnaissance phase is scheduled to be completed in July 2002. Based on funding availability, completion of the feasibility study is scheduled for July 2007.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Unalakleet Harbor, AK Alaska District	400,000	30,000	31,000	50,000	289,000

The city of Unalakleet is located on Norton Sound at the mouth of the Unalakleet River, 148 miles southeast of Nome and 395 miles northwest of Anchorage. Approximately 82 percent of the 800 people in Unalakleet are Alaska Natives. Unalakleet has a history of diverse cultures and trade activity. Both commercial fishing for herring and traditional Unaligmiut Eskimo activities are major components of Unalakleet's economy. Approximately 113 residents hold commercial fishing permits, and a new fish processing plant was recently completed. Presently, the fishing fleet, operating out of Unalakleet, uses a lagoon on the lee side of the spit on which the city is located. Vessels in the lagoon are able to moor, haul out, and access the fish processing facility. Access to the lagoon is difficult due to shoals and the shallow offshore channel of the river.

The barges which deliver fuel and supplies to the city are returned to transit only during the highest tides. Groundings of even the small fishing boats cause delays which reduce the value of the fish delivered to the processing plant and reduces effective commercial and subsistence fishing opportunities. The study will consider the benefits and costs of constructing a navigation system that would significantly reduce delays and vessel damages. The City of Unalakleet and the tribal village of Unalakleet are the likely sponsors and are familiar with the cost sharing requirements for the feasibility study. The reconnaissance study was completed in August 2000.

Fiscal Year 2002 funds will be used to initiate the feasibility phase of the study, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. Fiscal Year 2003 funds will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is \$800,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Costs	\$800,000
Reconnaissance Phase	N/A (Prepared under Coastal Navigation, AK parent study)
Feasibility Phase (Federal)	\$400,000
Feasibility Phase (Local)	\$400,000

The reconnaissance phase is scheduled for completion in July 2002. Based on funding availability, completion of the feasibility study is scheduled for August 2006.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Unalaska Harbor, AK Alaska District	900,000	539,000	142,000	144,000	75,000

Unalaska overlooks Iliuliuk Bay and Dutch Harbor on Unalaska Island in the Aleutian Chain. It lies 800 air miles from Anchorage and 1,700 miles northwest of Seattle. The name Dutch Harbor is often applied to the portion of the City on Amaknak Island, which is connected to Unalaska Island by a bridge. Dutch Harbor is actually within the boundaries of the City of Unalaska. Unalaska's economy is based on commercial fishing, fish processing, and fleet services such as fuel, repairs and maintenance, trade, and transportation. The community enjoys a strategic position as the center of a rich fishing area, and for transshipment of cargo between Pacific Rim trading partners. The Great Circle shipping route from major west coast ports to the Pacific Rim passes within 50 miles of Unalaska, and Dutch Harbor provides a natural protection for fishing vessels. Unalaska ranks as the number one port in the nation for seafood volume and value. Dutch Harbor is located within the boundaries of the City of Unalaska. Publicly owned marine facilities in the area do not adequately meet moorage needs at Unalaska. Additional harbor sites are being investigated. One proposed location in South Channel, Iliuliuk Bay, called "Little South America" could accommodate over 250 boats if fully developed. The proposed Little South America Harbor is located on the south end of Amaknak Island, which is remarkably similar in shape to the continent of South America. The harbor would be protected by stub rubblemound and floating breakwaters. The estimated project cost is \$20 million and the benefit cost ratio is estimated at 1.3. The City of Unalaska is the sponsor for the project.

The funds for Fiscal Year 2002 will be used to prepare an Environmental Impact Statement and to continue the feasibility phase of the study. Funds requested for Fiscal Year 2003 will be used to continue the feasibility study. The preliminary estimated cost of the feasibility phase is \$1,800,000, which is to be shared on a 50-50 basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows.

Total Estimated Study Cost	\$1,800,000	
Reconnaissance Phase (Federal)	N/A	(Prepared under Coastal Navigation, AK parent study)
Feasibility Phase (Federal)	900,000	
Feasibility Phase (Local)	900,000	

The reconnaissance phase was completed in June 1999. Based on funding availability, the feasibility study is scheduled for completion in March 2004.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Whittier Breakwater, AK Alaska District	521,000	127,000	94,000	50,000	250,000

Whittier is located on the western end of Prince William Sound about 60 miles east of Anchorage. A new road tunnel to Whittier opened in June 2000 and offers Anchorage residents and visitors relatively good access to this top quality marine environment; the next closest access to a coastal area is twice as far away at Seward. Additional boat launch and harbor facilities are needed to accommodate the large number of people that will be travelling to Whittier. Breakwaters (750 foot main and 150 foot spur) would protect a dredged small boat harbor and a boat launch facility.

The existing Whittier Harbor is full and has a long wait list of vessels wanting moorage space. Expanding the existing harbor is not feasible because of railroad facilities that must be kept in operation on the landward side and deep water on the seaward side makes expansion too costly. The only other harbor site that has road access is at the head of Passage Canal where a boat launch and small harbor could be constructed. State and local interests strongly support additional harbor facilities and are willing to cost share harbor development.

Whittier is surrounded by towering mountains which leave little flat land for development of onshore facilities for a boat harbor. Most of the people coming to Whittier from Anchorage will be interested in recreational boating or sport fishing which is not a high national priority for computation of benefits to justify Federal involvement. Some of the visitors will want to take charter boats for fishing and viewing of the magnificent glaciers and mountains. Corps policy currently limits recreational benefits to 50 percent of the cost of the facilities. The Reconnaissance report was completed in June 2001.

Fiscal Year 2002 funds will be used to complete the reconnaissance phase and initiate the feasibility phase, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. Fiscal Year 2003 funds will be used to continue the feasibility study. The preliminary estimate cost of the feasibility phase is \$600,000, which is to be shared on a 50-50 percent basis by Federal and non-federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$821,000
Reconnaissance Phase (Federal)	221,000
Feasibility Phase (Federal)	300,000
Feasibility Phase (Local)	300,000

The reconnaissance phase is scheduled for completion in May 2002. Based on funding availability, completion of the feasibility study is scheduled for June 2008.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Honolulu District					
Kawaihae Deep Draft Harbor Modifications Hawaii, HI	\$700,000	130,000	142,000	142,000	286,000
Honolulu District					

Kawaihae Harbor is located on the northwest coast of the island of Hawaii, approximately 85 miles northwest from Hilo, the county seat of the island of Hawaii. The existing project was completed in July 1962 and enlarged in January 1973. The project consists of a 3,270-foot long, 40-foot deep entrance channel; a 1,450-foot wide, 35-foot deep harbor basin; and a 2,650-foot long rubblemound breakwater. The barge pier and approximately half of the transpacific pier are not usable due to increased surge activity within the harbor causing delays in the loading and unloading of cargo. The surge problem occurs especially during the winter months when the north to northwest swells dominate the wave spectrum. Additionally, the surge actions within the harbor have resulted in damage to the piers and vessels. If improvements to the harbor are not implemented, the State's existing infrastructure will continue to be damaged, resulting in costly repairs.

Preliminary discussions with the local sponsor, the State Department of Transportation, indicate that navigation outputs are in accordance with Corps policy. The local sponsor fully understands the cost-sharing requirements of the study and is committed to active participation with the Corps. Fiscal Year 2002 funds are being used to execute Feasibility Cost Sharing Agreement and initiate feasibility level economic, environmental and hydraulic engineering studies. Fiscal Year 2003 funds will be used to continue feasibility study efforts. The total estimated cost of the feasibility phase is \$1,200,000, which will be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing follows:

Total Estimated Study Cost	\$1,300,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	600,000
Feasibility Phase (Non-Federal)	600,000

Based on funding availability, completion of the feasibility study is scheduled for June 2006

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Nawiliwili Harbor Modifications Kauai, HI Honolulu District	\$600,000	100,000	50,000	450,000	

Nawiliwili Harbor is located in Nawiliwili Bay on the southeast coast of the island of Kauai, approximately 93 nautical miles northwest of Oahu. Nawiliwili Bay is directly exposed to the prevailing northeast trade winds which frequently attain high velocities and result in high seas and swells. The existing federal project at Nawiliwili Harbor includes a 2,435 foot breakwater, a 2,400 foot long, 40 foot deep, S-shaped entrance channel with a minimum width of 600 feet, and a 35 foot deep harbor basin with a maximum width and length of 1,540 feet and 1,950 feet respectively. Kauai is presently enjoying a resurgence of economic activity including increasing demand to accommodate the State's plan to aggressively pursue a larger share of the lucrative North American passenger cruise market. If the marketing campaigns prove successful, port calls by foreign cruise vessels are eventually expected to increase by as much as 30-percent statewide. The State of Hawaii is currently pursuing plans to modify pier facilities at the harbor to address the demand. Among the navigational concerns raised by harbor pilots and users of Nawiliwili Harbor are harbor surge, size and depth of the harbor turning basin, and the configuration of the harbor channel. The safety concern currently is the navigability of "panamax" vessels which are 965 feet in length. As passenger cruise and other commercial vessel size and traffic increase to keep pace with Kauai's growing economy, concerns regarding these safety issues will continue to grow.

Preliminary discussions with the local sponsor, the State Department of Transportation, indicate that navigation outputs are in accordance with Corps policy. The local sponsor fully understands the cost-sharing requirements of the study and are committed to active participation with the Corps. Fiscal Year 2002 funds are being used to initiate the reconnaissance study. Fiscal Year 2003 funds will be used to initiate feasibility study efforts, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. The total estimated cost of the feasibility phase is \$1,000,000, which will be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing follows:

Total Estimated Study Cost	\$1,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	500,000
Feasibility Phase (Non-Federal)	500,000

Based on funding availability, completion of the feasibility study is scheduled for September 2010.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Rota Harbor Modifications, CNMI Honolulu District	900,000	0	16,000	25,000	859,000

Rota Harbor is located on the west coast of the island of Rota, Commonwealth of the Northern Mariana Islands (CNMI). The CNMI is comprised of a chain of 16 islands in the western Pacific approximately 3,700 miles west-southwest of Hawaii and 1,400 miles south of Tokyo, Japan. The island of Rota is located 53 miles south-southwest of the main island of Saipan and is approximately 11 miles long and averages about 4 miles in width.

The current harbor was constructed by the Corps of Engineers and completed in April 1985 under Section 107 of the River and Harbor Act of 1960, as amended. As an island community, Rota's population and economy are vitally linked to the shipment of goods into and out of Rota Harbor, the island's only commercial port. However, the existing harbor's size and configuration restricts larger sized vessels from calling on Rota Harbor and requires the transshipment of goods and material to and from Rota. The added cost of transshipment is estimated at \$13 million annually. The Commonwealth Ports Authority, the local sponsor, fully understands the cost-sharing requirements of the project.

Authority to conduct this study is provided under Section 444 of the Water Resources Development Act of 1996 (PL 104-303). Fiscal Year 2002 funds will be used to complete the reconnaissance phase and initiate feasibility studies, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. Fiscal Year 2003 funds will be used to continue feasibility study efforts to include environmental studies, oceanographic analysis and hydrographic surveys. The total estimated cost of the feasibility phase is \$1,400,000, to be shared on a 50-50 percent basis by Federal and non-Federal interests. Section 1156 of P.L. 99-662 provides for a waiver of local cost-sharing requirements up to \$200,000. A summary of cost sharing is as follows:

Total Estimated Study Cost	\$1,400,000	
Reconnaissance Phase (Federal)	N/A	(Conducted under Navigation Improvements, CNMI study)
Feasibility Phase (Federal)	900,000	
Feasibility Phase (Non-Federal)	500,000	(Reflects \$200,000 waiver under Sec 1156 of PL 99-662)

Based on funding availability, completion of the feasibility study is scheduled for September 2013.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Tinian Harbor Modifications, CNMI Honolulu District	800,000	0	16,000	50,000	734,000

Tinian Harbor is located on the southwestern coast of the island of Tinian, Commonwealth of the Northern Mariana Islands (CNMI). The CNMI is comprised of a chain of 16 islands in the western Pacific approximately 3,700 miles west-southwest of Hawaii and 1,400 miles south of Tokyo, Japan. Tinian is located 3 miles south south-west of the main island of Saipan. Tinian is approximately 13 miles long and averages about 6 miles in width. The shoreline is formed predominantly by sea cliffs 20 to 100 feet high. Tinian Island is subject to storm waves associated with tropical storms and typhoons. Due to Tinian's proximity to the typhoon breeding grounds, the island is threatened year round with the passage of a developing typhoon and on occasion, one of full strength. Typhoons are defined as storms with sustained wind speeds equal to or greater than 64 knots, while tropical storms are defined as having sustained wind speeds between 34 and 63 knots. Severe typhoons have occurred nearly every month of the year, but are most common between July and December. Tinian Harbor was originally constructed during World War II. The age of the existing harbor's breakwater and successive typhoons during the last few years have contributed to the deterioration of the breakwater and reduced usability of the harbor. As the island of Tinian's only commercial port and primary facility for the import and export of goods and material, Tinian Harbor is vital to the island's economic and social welfare. The island of Tinian is experiencing a period of rapid growth and development. Existing plans call for the construction of several large resort hotels. To meet the increased and growing demand in the area, the Government of the CNMI has identified the need for navigation improvements to the existing harbor. The present harbor's condition and limitations results in increased transportation costs to shippers. The Commonwealth Ports Authority, the local sponsor, fully understands the cost-sharing requirements of the project.

Authority to conduct this study is provided under Section 444 of the Water Resources Development Act of 1996 (PL 104-303). Fiscal Year 2002 funds will be used to complete the reconnaissance phase and initiate feasibility studies, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. Fiscal Year 2003 funds will be used to continue feasibility study efforts to include environmental studies, oceanographic analysis and hydrographic

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
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surveys. The total estimated cost of the feasibility phase is \$1,200,000, to be shared on a 50-50 percent basis by Federal and non-Federal interests. Section 1156 of P.L. 99-662 provides for a waiver of local cost-sharing requirements up to \$200,000. A summary of cost sharing is as follows:

Total Estimated Study Cost	\$1,200,000	
Reconnaissance Phase (Federal)	N/A	(Conducted under Navigation Improvements, CNMI study)
Feasibility Phase (Federal)	800,000	
Feasibility Phase (Non-Federal)	400,000	(Reflects \$200,000 waiver under Sec 1156 of PL 99-662)

Based on availability of funds, the feasibility study is scheduled for completion in September 2012.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Tutuila Harbor, Tutuila Island, American Samoa Honolulu District	430,000	206,000	78,000	100,000	46,000

A reconnaissance study was conducted under Western District Harbor, Tutuila Island, American Samoa, in Fiscal Year 1999 and initially focused on the potential development of a second commercial harbor within the Western District of Tutuila Island. Preliminary economic and cost data indicated that a harbor located within the Western District was not economically justified. However, potential federal and local sponsor interest was identified in a second commercial facility within Pago Pago Bay that will relieve congestion at the existing commercial harbor. The congestion is due to inadequate entrance channel, turning basin, and berthing space for the numerous fishing vessels that regularly visit American Samoa. Delays of one to three days have been experienced by vessels entering the existing harbor. The development of this second commercial facility would alleviate the congestion being experienced at Pago Pago Harbor, which is currently not a Federal harbor, but is important as the largest and only deep draft harbor in the territory.

The American Samoa government, the local sponsor, supports the development of a second commercial facility in Pago Pago Bay to include federal navigation features of an entrance channel and turning basin. Authority to conduct this study is provided under Section 444 of the Water Resources Development Act of 1996 (P.L. 104-303). The reconnaissance report was completed in July 1999 and the Feasibility Cost Sharing Agreement was executed in December 2000. Fiscal Year 2002 funds are being used to continue feasibility study efforts to include compilation of economic data, environmental studies, design efforts and public involvement. Fiscal Year 2003 funds will be used to continue the feasibility report. The American Samoa government is fully aware of the cost sharing requirements for a feasibility study. Although the preliminary estimated cost of the feasibility phase is \$460,000, to be shared on a 50-50 percent basis by Federal and non-Federal interests, Section 1156 of P.L. 99-662 provides for a waiver of local cost-sharing requirements up to \$200,000. A summary of cost sharing is as follows:

Total Estimated Study Cost	\$460,000
Reconnaissance Phase (Federal)	N/A (Conducted under Western District Harbor Study)
Feasibility Phase (Federal)	430,000
Feasibility Phase (Non-Federal)	30,000 (Reflects \$200,000 waiver under Sec 1156 of PL 99-662)

The feasibility study is scheduled for completion in September 2004 based on funding availability.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
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2b. Flood Damage Prevention Studies: The amount of \$250,000 is requested in Fiscal Year 2003 for two feasibility studies.

Alaska District

Barrow Coastal Storm Damage Reduction, AK Alaska District	1,745,000	170,000	157,000	200,000	1,218,000
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Barrow, the northernmost community in North America, is located on the Chukchi Sea coast, 10 miles south of Point Barrow from which it takes its name. It lies 725 air miles from Anchorage. Barrow is the economic center of the North Slope Borough and numerous businesses provide support services to oil fields. Marine and land transportation provide seasonal access. Presently, numerous public facilities are threatened by the continued loss of shoreline and narrowing of approximately 5,000 feet of beach, fronting the community. During the winter, nearshore pack ice prevents the formation of waves during severe storms; this in turn protects the shoreline that is composed of a very fine, well-rounded sand. However, recent years have seen the pack ice remaining further offshore for longer periods of time thereby allowing severe storms to generate wind driven waves that cause massive erosion along the shoreline. If this trend continues, the threatened facilities at Barrow could be impacted within the next one to two years. Local officials also believe that sand-mining operations carried out by the Department of Defense during the 1950's through the 1970's have contributed to the existing shoreline erosion problems. Utilidors (below ground tunnels containing utility lines), roads, wastewater treatment facilities, and a 32-unit borough owned apartment building are among the public facilities threatened. Also, the Barrow solid waste landfill is threatened and poses a tremendous environmental threat to the marine environment due to the potentially hazardous nature of wastes placed in the landfill. Private facilities are also threatened and would incidentally benefit from a project. These include a gas station, a hotel, and numerous small shops. The study will consider the benefits and costs for protecting the shoreline, fronting the city. It will also evaluate the merits of flood damage reduction measures and identify if opportunity for navigation improvements to facilitate development of a harbor and related facilities exist.

The reconnaissance report was completed in June 2001. Fiscal Year 2002 funds are being used to negotiate the feasibility study cost sharing agreement with the local sponsor and to initiate the feasibility phase studies, pending availability of local sponsor funding. Fiscal Year 2003 funds will be used to continue the feasibility phase. The preliminary estimated

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
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cost of the feasibility phase is \$3,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. The City of Barrow will be the local sponsor, and it understands the cost sharing that would be needed for a feasibility study. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$3,245,000
Reconnaissance Phase (Federal)	245,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Local)	1,500,000

The reconnaissance phase is scheduled for completion in July 2002. Based on funding availability, completion of the feasibility study is scheduled for June 2008.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Skagway River Flood Control, AK Alaska District	500,000	0	63,000	50,000	387,000

Skagway is a small community located at the northernmost end of Taiya Inlet. The community is 90 miles northeast of Juneau.

The existing Flood Control project was authorized by the River & Harbor Act, 20 June 1938 and provides for a rock, brush and earth training dike 6,700 feet long on the east bank of the Skagway River, and a rubble-mound containment structure 1,800 feet long across the tide flats. A modification, authorized by the Flood Control Act, 24 July 1946 provided for restoration of the 1,800 foot containment structure and construction of a 300' extension and reconstruction of the existing 6,700 foot dike. In 1951, extensive emergency repairs were made to the dike. In 1986, based on annual inspections, the city was notified that additional repairs were required. The city corrected the most critical repairs in 1993. The Corps of Engineers continues to perform annual inspections in accordance with the agreement of local cooperation. The project presently needs enlargement and modification. There is a need to prevent scouring and aggradation of the riverbed. The airport is exposed to flooding and subject to major damages. The historical value of the town site is a major feature.

Much of the old city is now in the Klondike Gold Rush National Historic Park. This study will consider the benefits and costs of improving the dike and the containment structure. The city is the likely sponsor and has listed this project as a high priority. They are familiar with the cost sharing requirements for the feasibility study.

Fiscal Year 2002 funds are being used to initiate the reconnaissance phase of the study. Fiscal Year 2003 funds will be used to complete the reconnaissance phase and initiate the feasibility study, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. The preliminary estimated cost of the feasibility phase is \$800,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. The City of Skagway will be the local sponsor, and it understands the cost sharing that would be needed for a feasibility study. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$900,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	400,000
Feasibility Phase (Local)	400,000

The reconnaissance phase is scheduled for completion in January 2003. Based on funding availability, completion of the feasibility study is scheduled for August 2007.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
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2c. Shore Protection: The amount of \$50,000 is requested in Fiscal Year 2003 for one feasibility study.

Honolulu District

Kihei Area Erosion,	600,000	100,000	101,000	50,000	349,000
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Maui, HI

Honolulu District

The Kihei area is located on the southwestern coast of the island of Maui and has experienced significant shoreline erosion within the past 30 years. One of the most severely eroded beaches on Maui is a 5,500 foot-long segment from Kalama Park to the shoreline along the southern half of Halama Street in Kihei. Erosion in the adjacent areas has continued and the risk of damage to houses, the main coastal road and park facilities remain high during high wave events. Some local studies have estimated that as much as one-third of the sandy shoreline of the island have experienced significant erosion. Since the economy of the State is tied very closely to the health of the shoreline, there is considerable Congressional and local interest in protecting the shorelines. The potential local sponsor is the County of Maui and is aware of the cost sharing requirements and committed to active participation.

Authority to conduct this study is provided by Section 209 of the Rivers and Harbor act of 1962 (PL 87-874). Fiscal Year 2002 funds will be used to complete the reconnaissance phase and initiate feasibility studies, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. Fiscal year 2003 funds will be used to continue with feasibility study efforts to include economic, environmental, hydrologic and hydraulic studies. The total estimated cost of the feasibility phase is \$1,000,000, to be shared on a 50-50 percent basis by Federal and non-Federal interests.

A summary of cost sharing is as follows:

Total Estimated Study Cost	\$1,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	500,000
Feasibility Phase (Non-Federal)	500,000

The feasibility study is scheduled for completion in September 2007 based on funding availability.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
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2d. Special Studies: The amount of \$335,000 is requested in Fiscal Year 2003 for four feasibility studies.

Alaska District

Chena River Watershed Study, AK Alaska District	912,000	486,000	126,000	50,000	250,000
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The Chena River originates in a mountainous area about 90 air miles east of Fairbanks in central Alaska. The river flows southwest from its headwaters to its confluence with the Tanana River at Fairbanks. The Chena River watershed encompasses approximately 2,115 square miles. The Chena River Lakes Flood Control Project, completed in 1981, is located 17 miles east of Fairbanks on the Chena River. The project functions to divert flood flows into the Tanana River, providing flood protection to the city and surrounding low areas. Much of the watershed, especially the lower areas, contains environmentally sensitive wetlands. About 75 regulatory permit actions per year have been processed regarding these wetlands, and future urbanization and mining activity is expected to increase the number of actions. Concern has been expressed about the effects of population growth and development on fish and wildlife in the watershed. Problems identified within the Chena River watershed include a lack of quality brood production habitat for waterfowl and limited spring and fall migratory bird habitat in and around the Fairbanks/North Pole area and project lands of the Chena River Lakes Flood Control Project; degraded aquatic habitat on streams in the Little Chena River watershed due to abandoned mines; and degraded arctic grayling and other fisheries habitat on Noyes and Badger Sloughs. Other problems identified within the watershed include problems related to erosion and bank protection measures on the Chena River, the potential for degradation of water quality and aquatic habitat with uncontrolled erosion, and the potential for loss of important riparian habitat as landowners along the river attempt to protect their investments. The potential for loss of important fish and wildlife habitat on the Little Chena River watershed was also noted. Within the Chena River watershed, there is also the potential for the loss of flood control capability if key wetland areas are developed. To address these problems, the reconnaissance study recommends several cost-shared management plans, and further cost-shared feasibility studies for the following:

- Creation of shallow-water wetlands on the Chena Lakes Flood Control Project lands (potential sponsor: Ducks Unlimited).
- Restoration of aquatic habitat on streams degraded by mining in the Little Chena River Watershed (potential sponsor: Alaska Department of Fish and Game, State of Alaska Parks Division Office).

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
<ul style="list-style-type: none">• Restoration of arctic grayling and other fisheries habitat on Noyes Slough, in downtown Fairbanks (potential sponsors: Fairbanks North Star Borough, Alaska Department of Fish and Game).• Restoration of arctic grayling habitat on Badger Slough (potential sponsor: Alaska Department of Fish and Game). The Alaska Department of Fish and Game and the Alaskan Department of Transportation and Public Facilities have participated in initial negotiations for the Badger Slough habitat study					

Funds requested for Fiscal Year 2002 are being used to initiate the feasibility phase, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. The preliminary estimated cost of the feasibility phase is \$600,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,212,000
Reconnaissance Phase (Federal)	612,000
Feasibility Phase (Federal)	300,000
Feasibility Phase (non-Federal)	300,000

The feasibility study completion is scheduled for completion in September 2008 based on funding availability.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Ship Creek Watershed, AK Alaska District	571,000	190,000	94,000	50,000	237,000

Ship Creek begins in the Chugach Mountains east of Anchorage. The creek flows through Fort Richardson Army Post and Elmendorf Air Force Base and finally through an industrial part of Anchorage before emptying into Cook Inlet. Ship Creek is a non-glacial stream with clear water and an average annual flow of 144 cubic feet per second (cfs). Extreme low flows, which occur in winter when the creek is frozen, can be less than 10 cfs. In the developed part of the creek, there are many storm drain outfalls, which are a major source of contamination. There is a Superfund site along the creek, which has undergone a major cleanup since 1986. EPA has initiated a final cleanup of the site to include long-term, on-site storage of contaminated soil. There are two State-operated fish hatcheries and four dams on the creek. Water diverted from the creek is used by the Municipality of Anchorage and the military bases for drinking water and as coolant for electric generating plants. Ship Creek is popular for sport fishing among local residents and tourists. Approximately 5,000 king salmon return to the creek each year. With the king and silver sport fishery, Ship Creek is the second most heavily fished stream in Alaska and has one of the largest urban king salmon fisheries in the State. Anchorage and the Alaska Railroad Corporation (ARRC) have great interest in improving this watershed, but have found that the lack of documented information about the watershed and conflicting interests have been a major factor in their lack of progress. The Corps' watershed study would focus on the creek's hydraulics, hydrology, and sediment transport dynamics. Sedimentation traps and inputs would be assessed, as well as flooding and erosion issues. Trends in fish and wildlife population health, and in fishing and hunting harvests would also be evaluated. The study would identify means to eliminate, attenuate, or otherwise mitigate fish and wildlife resource adversity. The study can provide a basis for initiating a watershed management plan that could be used to guide development in the area and eliminate or minimize potential pollution sources while improving water quality. The study would propose measures with a Federal interest, which are economically justified or otherwise in keeping with current administrative policy.

Fiscal Year 2002 funds are being used to negotiate the Feasibility Cost Sharing Agreement with the local sponsor. FY 2003 funds will be used to initiate the feasibility phase, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. The preliminary estimated cost of the feasibility phase is \$700,000, which is to be

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
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shared on a 50-50 percent basis by Federal and non-Federal interests. Anchorage and the Alaska Railroad Corporation would be the local sponsors, and both understand the cost sharing needed for a feasibility study. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$921,000
Reconnaissance Phase (Federal)	221,000
Feasibility Phase (Federal)	350,000
Feasibility Phase (Local)	350,000

The reconnaissance phase will be completed in July 2002. Based on funding availability, completion of the feasibility study is scheduled for September 2007.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Honolulu District					
Ala Wai Canal, Oahu, HI	885,000	230,000	220,000	135,000	300,000
Honolulu District					

The Ala Wai Canal, located in the Waikiki area on the Island of Oahu, is a two-mile long man-made waterway constructed during the 1920's that has served as a collection and transmission point for discharged silt, pollutants and floodwaters from the Makiki, Manoa and Palolo drainage basins and surrounding areas of Waikiki. This drainage area encompasses a total land area of approximately 16.3 square miles. The two-mile long canal is approximately half a mile inland from Hawaii's major landmark and primary tourist destination Waikiki Beach. The 150-to 250-foot-wide canal was originally dredged to a depth of 25 feet. In recent years the accumulation of debris, especially at the confluence of the major stream tributaries of the Makiki and Manoa-Palolo Stream and the Ala Wai Canal, has resulted in depths of only one to two feet. With increased urbanization of the drainage basin, the potential flood risk to the Waikiki area has become a major concern to the local sponsor. During the passage of Hurricane Iniki in 1992, the Ala Wai Canal overtopped its bank near the McCully Bridge and caused some flooding of streets in the Waikiki area. Flood mitigation measures, including both non-structural and structural alternatives, will be addressed and investigated for potential implementation.

The Ala Wai Canal also serves as an important link between the freshwater ecosystems of the upper drainage basins and the marine environment along the coast. Endemic amphidromous species such as native gobies and shrimp that had once utilized the Ala Wai Canal as a migratory pathway from the mountains to the sea are nearly non-existent. The accumulation of silt and pollutants over the years has resulted in a steady decline in water quality and has affected water flow and circulation. The deterioration of water quality in the canal is evidenced by health warning signs posted by the State of Hawaii Department of Health relating to the consumption of fish and crab, murky waters, floating and submerged debris, foul stench, and the proliferation of tilapia, one of the few fish species capable of surviving in this aquatic environment. This deterioration of water quality has adversely impacted traditional recreational and marine activities. The degradation of water quality in the canal has limited aquatic fauna to alien species capable of surviving in low dissolved oxygen-high sediment aquatic environments. According to a 1989 Hawaii Stream Assessment Survey, native species of gobies once present within the Ala Wai tributaries were no longer found in a recent Fish and Wildlife Survey of the upper Palolo Watershed. In a cooperative effort with Federal, State and local agencies, an effective comprehensive management and restoration plan will need to be implemented to restore aquatic habitat and biological diversity once present in the canal and upstream tributaries.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
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The State Department of Land and Natural Resources, the local sponsor, is fully aware of the cost sharing requirements for a feasibility study and is fully committed to actively participate with the Corps of Engineers. The feasibility cost sharing agreement was executed in April 2001. Fiscal Year 2002 funds are being used to continue feasibility study efforts, to include environmental, hydrologic, hydraulic and geotechnical engineering studies. Fiscal Year 2003 funds will be used to continue feasibility phase studies. The total estimated cost of the feasibility phase is \$1,520,000, which is to be cost shared at 50 percent by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,645,000
Reconnaissance Phase (Federal)	125,000
Feasibility Phase (Federal)	760,000
Feasibility Phase (Non-Federal)	760,000

The feasibility study is scheduled for completion in September 2006 based on funding availability.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Kahuku Watershed, HI Honolulu District	600,000	100,000	31,000	100,000	369,000

The Kahuku Area is located on the northeastern coast of the island of Oahu, State of Hawaii, between Kawela and Laie along Highway 83 and covers approximately 2.525 sq kilometers. There are significant opportunities in the Kahuku watershed area for ecosystem improvements combined with floodplain management measures. Kahuku has historically experienced repeated flooding and drainage problems. The most recent major storm occurred in March 1991 which caused substantial damage to the community which flooded the Campbell Wild Life Preserve (managed by the U.S. Fish and Wildlife Service (USFWS)), aquafarms, residences, schools, and businesses. Estimated losses from this event totaled \$6.4 to \$10.3 million. Several factors can be cited: (1) Ponding in the flat, low-lying developed areas on both sides of Kamehameha Highway due to lack of an adequate drainage system; (2) The formation of sand dunes at the channel mouths which prevent floodwaters from discharging into the ocean; and, (3) Land developments that may have impeded flows to the ocean. In addition, the USFWS is actively seeking to expand the wetlands and birdlife habitat, increasing the ecological value of the area and which simultaneously may provide upstream detention storage. The feasibility study will investigate and recommend improvements to address these problems. The identification of a local sponsor is now under discussion with the City and County of Honolulu, and the State of Hawaii. Both agencies are fully aware of the cost sharing requirements and are fully committed to active participation.

Authority to conduct this study is provided under Section 209 of the River and Harbor Act of 1962 (PL 87-874). Fiscal Year 2002 funds are being used to complete the reconnaissance phase and initiate feasibility studies, pending availability of local sponsor funding and execution of the feasibility cost sharing agreement. Fiscal Year 2003 funds will be used to continue with feasibility study efforts to include economic studies, environmental, hydrologic, and hydraulic engineering studies. The total estimated cost of the feasibility phase is \$1,000,000 and will be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of cost sharing is as follows:

Total Estimated Study Cost	\$1,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	500,000
Feasibility Phase (Non-Federal)	500,000

The feasibility study is scheduled for completion in September 2006 based on funding availability.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
2e. Comprehensive Studies: None.					
2f. Project Review Studies: None.					
3. PRECONSTRUCTION ENGINEERING AND DESIGN - NEW					
3a. Navigation: None					
3b. Flood Control: None					
3c. Shoreline Protection: None.					
3d. Multiple Purpose Projects: None.					
4. PRECONSTRUCTION ENGINEERING AND DESIGN - CONTINUING					
4a. Navigation: The amount of \$590,000 is requested in Fiscal Year 2003 for six continuing PED projects.					

Alaska

Akutan Harbor, AK	600,000	0	0	200,000	400,000
Alaska District					

The city of Akutan lies on the north shore of Akutan Harbor, a large, protected bay opening to the Bering Sea on the eastern side of Akutan Island. The city is about 40 miles east of Unalaska/Dutch Harbor (55 miles by boat). Akutan Island is approximately 590 miles southwest of Kodiak and 790 miles southwest of Anchorage. Protected moorage is needed for the fleet of commercial fishing vessels that use Akutan as a base of operations. Local residents report the most severe winds blow from the southeast/east and southwest directions and along the length of the bay throughout the fall and winter months. The eastern part of the bay can sustain waves of 8 feet or more during particularly severe easterly/southeasterly storms. Waves of 5 to 6 feet are common during major storms in the mid-bay vicinity off the Trident Seafood processing plant. The best and most sheltered location for a small boat harbor facility is west of the Trident plant at the head of the bay. During storms, vessels anchor in the head of the bay for protection, but still maintain a crew watch and often maintain power to prevent dragging their anchors. Vessels requiring storm protection include 76 crabbers and trawlers, ranging in size from

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
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80 to 210 feet, and 19 smaller vessels and skiffs, ranging in size from 14 to 32 feet. Fish processing is the major industry attracting vessels to Akutan. The estimated project cost is \$20 million and the benefit cost ratio is estimated at 1.3. The

Aleutians East Borough is the sponsor for the project. The Aleutians East Borough will provide 25 percent of the Preconstruction Engineering and Design (PED) cost. PED will ultimately be cost-shared at the rate for the project to be constructed. Any adjustments that may be necessary to bring the non-Federal share in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$800,000	Engineering and Design Costs	\$800,000
Initial Federal Share	600,000	Ultimate Federal Share	640,000
Initial Non-Federal Share	200,000	Ultimate Non-Federal Share	160,000

The project is not authorized for construction. Fiscal year 2002 funds are being used to finish the feasibility report. Fiscal year 2003 funds will be used to initiate Preconstruction Engineering and Design (PED). The feasibility is scheduled for completion in September 2002. The PED phase is scheduled for completion in September 2006 based on funding availability.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
False Pass Harbor, AK Alaska District	600,000	350,000	197,000	25,000	28,000

False Pass is a small community on the east side of Unimak Island at the eastern end of the Aleutian Island chain about 700 air miles southwest of Anchorage. The east shoreline of Unimak Island adjoins Isanotski Strait and Bechevin Bay, which provide passage from the Pacific Ocean to the Bering Sea. Access is by air and water, as no road network exists. The community livelihood comes from the support of commercial fishermen using the passage. Without safe moorage, weather conditions make it impractical to keep a boat in the water year-round. A protected harbor would enable year-round moorage for commercial fishing activities. Several important fisheries within proximity are salmon, pollock, herring, halibut, crab, and cod, which attract commercial fishermen during the summer. Very good crab and pollock fisheries exist in the Bering Sea to the north of Unimak Island and salmon to the south. Overcrowding of existing facilities occurs frequently during the summer season. The existing exposed pier and cove may be used only with good weather. Safe moorage between seasons is not possible for crew changes or refuge from storms. Additional berths in a protected harbor would help meet area demand for an estimated 100 commercial boats. A safe harbor facility would induce many of them to locate their boats at False Pass for overall savings in operating cost. A protected harbor can provide space for anticipated commercial fishing use year-round, as well as become a harbor of refuge from storms or other emergencies. Several commercial boats in recent years have been either damaged or sunk within the area because there was no safe refuge from storms. A cost-shared feasibility study was completed in October 2000 and a Chief's Report was signed in December 2000. Congress authorized construction in the 2000 WRDA. The Aleutians East Borough is the sponsor for the project. The estimated project cost is \$12.8 million without betterments and the benefit cost ratio is estimated at 1.2. The Aleutians East Borough is providing 25 percent of the Preconstruction Engineering and Design (PED) cost. The PED agreement was executed in March 2001. PED will ultimately be cost-shared at the rate for the project to be constructed. Any adjustments that may be necessary to bring the non-Federal share in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$800,000	Engineering and Design Costs	\$800,000
Initial Federal Share	600,000	Ultimate Federal Share	640,000
Initial Non-Federal Share	200,000	Ultimate Non-Federal Share	160,000

The project is authorized for construction. Fiscal Year 2002 funds are being used to continue PED. Fiscal Year 2003 funds will be used to continue PED. Based on funding availability, completion of PED is scheduled for September 2004.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Haines Harbor, AK Alaska District	600,000	0	0	115,000	485,000

Haines is a small community located at the northern end of Lynn Canal. The community is 90 miles northwest of Juneau. The city desires expansion of the existing Haines Small Boat Harbor. The harbor is used by local and transient fishermen primarily employed in halibut and gillnet salmon fishing. The 200 vessel capacity harbor is also home to resident recreational craft. Haines is an important link in the Alaska marine highway system. It is located at the southern end of the Haines Highway, linking southeastern Alaska by road with interior Alaska, the south-central region, and the Yukon Territory. The existing harbor was expanded in 1976. The seaward leg of the existing breakwater was removed, and the basin was dredged in a stepped fashion to -12 feet and -14 feet MLLW. The entrance channel was dredged to -15 feet MLLW. The proposed project will provide additional moorage space to meet current and projected demands. The addition to moorage space will do much to cut the costs due to crowding and delays. Costs of transporting fresh halibut and salmon to market will be significantly reduced resulting in transportation savings of more than a million dollars per year. The city of Haines is the local sponsor for the project and they understand the cost sharing that would be needed for design and construction.

The city of Haines will provide 25 percent of the Preconstruction Engineering and Design (PED) cost. PED will ultimately be cost-shared at the rate for the project to be constructed. Any adjustments that may be necessary to bring the non-Federal share in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$800,000	Engineering and Design Costs	\$800,000
Initial Federal Share	600,000	Ultimate Federal Share	640,000
Initial Non-Federal Share	200,000	Ultimate Non-Federal Share	160,000

The project is not authorized for construction. Fiscal year 2002 funds are being used to complete the feasibility report. Fiscal year 2003 funds will be used to initiate Preconstruction Engineering and Design (PED). Based on funding availability, completion of PED is scheduled for September 2007.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Sand Point Harbor, AK Alaska District	468,000	393,000	25,000	50,000	0

Sand Point is a commercial fishing community located in the Shumagin Islands 570 miles southwest of Anchorage and about midway between Kodiak and Dutch Harbor. The 150 available spaces in the harbor are heavily used by locally based and transient vessels. The need for additional moorage has intensified in recent years due to full Americanization of the bottomfish harvest (2 million metric tons per year in the Bering Sea/Aleutian Island region) and continued large harvest of tanner crab. The 1998 feasibility study identified a Federal interest in expanding the existing harbor to provide additional moorage, thereby reducing travel cost and damage to vessels from overcrowding. The benefit cost ratio is 1.4 to 1. The project was authorized for construction in WRDA 1999.

Sand Point and the Aleutians East Borough are providing 25 percent of the Preconstruction Engineering and Design (PED) cost. The PED agreement was executed in July 1998. PED will ultimately be cost-shared at the rate for the project to be constructed. Any adjustments that may be necessary to bring the non-Federal share in line with the project cost sharing will be accomplished in the first year of construction.

Fiscal year 2002 funds will be used to conduct additional environmental studies on the Steller's Eider, which was recently listed as a threatened species under the Endangered Species Act. Fiscal year 2003 funds will be used to continue the Steller's Eider study, update the economics, and complete the design phase.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$624,000	Engineering and Design Costs	\$624,000
Initial Federal Share	468,000	Ultimate Federal Share	499,000
Initial Non-Federal Share	156,000	Ultimate Non-Federal Share	125,000

The project is authorized for construction. Based on funding availability, completion of PED is scheduled for October 2003.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Valdez Harbor, AK Alaska District	450,000	0	0	150,000	300,000

Valdez is located at the extreme northeastern end of Valdez Arm in Port Valdez, approximately 115 miles east of Anchorage. The Valdez port area is located near the head of the bay, with the town site occupying the uplands along the north shore. There is currently a lack of adequate moorage space at the small boat harbor. Rafting during the commercial fishing season has been reported up to eight boats deep on a regular basis. The problem is highly seasonal, requiring a large need for transient space primarily during the summer months. The current number of vessel owners waiting for a slip is 156. The waiting time is 5 to 8 years. The Alyeska Pipeline Service Company provides oil spill response support activities for marine areas in and adjacent to Valdez Arm through its SERVVS dock. The dock's exposed location is not protected during adverse weather. SERVVS vessels are often subject to severe weather, which can cause vessel damage and undesirable berthing conditions at the present facility. The estimated project cost for the project is \$13.8 million and the benefit/cost ratio is estimated to be 1.4 according to the 905b Analysis dated 29 Oct 98. The City of Valdez has agreed to sponsor the Preconstruction Engineering and Design cost and is aware of the 25-percent study cost-sharing requirement. PED will ultimately be cost-shared at the rate for the project to be constructed. Any adjustments that may be necessary to bring the non-Federal share in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	\$600,000	Total Estimated Preconstruction Engineering and Design Costs	\$600,000
Initial Federal Share	450,000	Ultimate Federal Share	480,000
Initial Non-Federal Share	150,000	Ultimate Non-Federal Share	120,000

The project is not authorized for construction. Fiscal Year 2002 funds are being used to complete the feasibility report. Fiscal Year 2003 funds will be used to initiate PED. Based on funding availability, completion of PED is scheduled for September 2006.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Honolulu District					
Barbers Point Harbor Modification, Oahu, HI	600,000	0	63,000	50,000	487,000
Honolulu District					

Barbers Point Harbor is located on the Ewa plains along the western coast of the Island of Oahu, Hawaii, and is situated adjacent to the 1,367-acre James Campbell Industrial Park (Oahu's major industrial area) and the 800-acre Kapolei Business Park. The harbor was originally intended to serve as a deepwater relief harbor for the port of Honolulu and to service the shipping requirements of the industries at Campbell Industrial Park, thus eliminating or reducing the need for considerable overland transshipment expense involved in importing and exporting via Honolulu Harbor and the congested Honolulu metropolitan area. However, the rapid development and growth of the Ewa plains region and the establishment of the community of Kapolei as Oahu's second urban center near Barbers Point have placed increased importance and demand on the harbor to service the growing communities, businesses, and industries in the Ewa area. The recommended plan, estimated to cost \$31.0 million (\$23.2 million Federal; \$7.8 million non-Federal), is to deepen the entrance and access channels to -44 feet and also deepen the turning basin to -42 feet. The benefit-cost ratio is 1.01 to 1. The local sponsor is the State Department of Transportation and they are willing to meet the cost sharing requirements for Preconstruction Engineering and Design (PED) and subsequent project construction in accordance with project cost sharing. PED will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED period at 25% non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction. A summary of study cost sharing is as follows:

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$800,000	Engineering and Design Costs	\$800,000
Initial Federal Share	600,000	Ultimate Federal Share	600,000
Initial Non-Federal Share	200,000	Ultimate Non-Federal Share	200,000

Fiscal Year 2002 funds are being used to complete the feasibility study and to initiate PED activities pending execution of the PED cost-sharing agreement and availability of local sponsor funding. Fiscal Year 2003 funds will be used to continue PED efforts. The project is not authorized for construction. Based on funding availability, PED completion is scheduled for completion in September 2011.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
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4b. Flood Control: The amount of \$50,000 is requested in Fiscal Year 2003 for one continuing PED project.

Honolulu District

Wailupe Stream Flood Control, Oahu, HI	2,400,000	0	63,000	50,000	2,287,000
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Honolulu District

The Wailupe Stream drainage basin is located along the southeast coast of the Island of Oahu. Wailupe Stream drains an area of about 3.2 square miles along the southeast coast of Oahu. The Wailupe Stream 100-year flood plain encompasses more than 820 residential and commercial structures in the Aina Haina residential community. Several floods have occurred along the Wailupe Stream since Aina Haina was developed. Damages from the flood of March 5-6, 1958 and December 16-18, 1967 were significant and pointed to the need for additional flood protection. A feasibility report was terminated in February 1999 because an alternative with a favorable benefit-to-cost ratio could not be developed. The most economically favorable plan of improvement developed during the feasibility study included two new debris basins; 1,000 feet of concrete invert lining; 7,600 feet of concrete channelization; 116 feet of excavated channel extending into the ocean; and highway bridge modifications. The plan had a benefit-to-cost ratio of 0.89.

Strong support from the community, local politicians, and the feasibility study co-sponsors, the State of Hawaii and City and County of Honolulu, for continued flood control development resulted in a Congressional Add in Fiscal Year 2002 and provided were funds to initiate preconstruction engineering and design activities. The co-sponsors had already appropriated funds for cost-sharing in anticipation of federal funds becoming available. PED will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED period at 25% non-Federal cost. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$3,200,000	Engineering and Design Costs	\$3,200,000
Initial Federal Share	2,400,000	Ultimate Federal Share	2,080,000
Initial Non-Federal Share	800,000	Ultimate Non-Federal Share	1,120,000

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
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The project is not authorized for construction. Fiscal Year 2002 funds are being used to prepare, at full Federal expense, the project management plan, cost estimates, scopes of work, and negotiation and execution of a cost-shared design agreement. The design agreement will specify a cost shared (75% Federal, 25% non-Federal) design report which will include NEPA documentation and re-evaluation of the economic feasibility. Fiscal Year 2003 funds will be used to continue PED activities which are scheduled for completion in September 2013 based on funding availability.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
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4c. Shoreline Protection: The amount of \$48,000 is requested in Fiscal Year 2003 for one continuing PED project.

Honolulu District

Waikiki Area Erosion, Oahu, HI	1,125,000	0 220,000	48,000	857,000
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Honolulu District

Waikiki Beach is located on the southern coast of the island of Oahu, approximately three miles from metropolitan Honolulu and is a major attraction for both tourists and local resident. It extends approximately two miles from Diamond Head, on the southern end, to the Ala Wai Harbor, on the northern end. The Waikiki Beach Erosion Control Project was authorized for construction by the River and Harbor Act of 1965 (PL 89-298). Due to the economic impacts associated with the physical health of Waikiki Beach, there is a strong Congressional and local interest in continuing this project. The State of Hawaii, Department of Land and Natural Resources, the potential local sponsor, fully understands the cost-sharing requirements of the project. The study will re-evaluate alternatives to restore a recreational reach and to provide stability to the shoreline in the Waikiki area. The study will also include an analysis of environmental resources that have been or may be threatened by erosion of the shoreline and a regional economic development analysis.

Fiscal Year 2002 funds will be used initiate a General Reevaluation Report, pending availability of local sponsor funding and execution of a PED agreement. Fiscal year 2003 funds will be used to continue efforts to complete the GRR and NEPA documentation. PED will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED period at 25% non-Federal cost. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction. A summary of cost sharing is as follows:

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$1,500,000	Engineering and Design Costs	\$1,500,000
Initial Federal Share	1,125,000	Ultimate Federal Share	750,000
Initial Non-Federal Share	375,000	Ultimate Non-Federal Share	750,000

PED is scheduled for completion in September 2012 based on funding availability.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

Pacific Ocean Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
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4d. Multiple Purpose Projects: None.

CONSTRUCTION, GENERAL: The amount of \$25,484,000 is requested in Fiscal Year 2003 for 6 Navigation and One Flood Damage Protection Project.

APPROPRIATION TITLE: Construction, General - Navigation - Channels and Harbors
Alaska District

PROJECT: Chignik Harbor, Alaska (Continuing)

LOCATION: Chignik is located in southwest Alaska on the south shore of the Alaska Peninsula.

DESCRIPTION: The project consists of a 1,120 foot southern rubblemound breakwater and a 940 foot northern breakwater, with a 150 foot wide entrance channel through a gap in the breakwaters. The harbor will serve 9 acres of moorage.

AUTHORIZATION: Water Resource Development Act of 1996

REMAINING BENEFIT-REMAINING COST RATIO: 2.0 to 1.0 at 7-5/8 percent.

TOTAL BENEFIT-COST RATIO: The current benefit to cost ratio is 2.0 to 1.0 at 7-5/8 percent.

INITIAL BENEFIT-COST RATIO: 2.0 to 1.0 at 7-5/8 percent (FY 1998).

BASIS OF BENEFIT-COST RATIO: Feasibility Report of February 1996 at October 1995 price levels.

SUMMARIZED FINANCIAL DATA:

		STATUS (1 Jan 02)	% Complete	Completion Schedule
Estimated Appropriation Requirement (CofE)	\$7,272,000	Entire Project	13	Sep 2003
Estimated Appropriation Requirement(U.S.C.G.)	8,000			
Estimated Total Appropriation Requirement	\$7,280,000			
Future Non-Fed Reimbursement	708,000			Based on
Estimated Federal Cost (Ultimate)	\$6,572,000			funding
Estimated Non-Fed Cost	1,616,000			availability
Cash Contributions	808,000			
Other	100,000			
Reimbursement	708,000			
Total Estimated Project	\$8,188,000			

SUMMARIZED FINANCIAL DATA: (Continued)

		ACCUM PCT OF FED COST	PHYSICAL DATA	Northern	Southern
Allocations to 30 September 2001	\$951,000		Breakwater length	940	1,120
Conference Allowance for FY 2002	3,300,000		Entrance Channel		
Allocations for FY 2002	3,201,000	1/	Width (ft)	150	
Allocations thru 2002	4,152,000	57	Depth (ft)	-19.5	
Allocations requested for FY 2003	\$3,120,000	100	Mooring Area		
Programmed Balance to Complete after FY 2003	0		Total Area	-12 to -16.5	
Unprogrammed Balance to Complete after FY 2003	0		MLLW Depth (ft)		
			Acres	9.0	

1/ Reflects \$527,000 assigned as savings and slippage, and \$428,000 reprogrammed into the project.

JUSTIFICATION: The city of Chignik is situated on the south shore of Alaska Peninsula in Southwestern Alaska. It is an active and growing island port whose economy is heavily dependent on commercial fishing. The local fleet presently anchors in the ice free, but inadequately protected harbor or ties up at the exposed city dock. At present boats are subject to overcrowding and hazardous mooring conditions between fishing periods. The anchorage is exposed to all storms from the southeast clockwise to the northwest. The violent southeast and northwest storms often damage and sometimes destroy boats by forcing them ashore or on the exposed rock reefs at low tides. The proposed project would provide a protected harbor, which would produce benefits in the form of reduced boat damage, increased fish harvest, and a harbor of refuge. The average annual navigation benefits attributable to the project are currently estimated at \$1,695,400.

FISCAL YEAR 2003: The requested amount of \$3,120,000 will be applied as follows:

Complete Breakwaters and Seawalls	\$2,820,000
Complete Engineering and Design	20,000
Complete Construction Management	280,000
Total	\$3,120,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Requirements of Local Cooperation Reimbursements Costs		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$100,000	
Pay 10 percent of the costs allocated to deep draft navigation during construction.	808,000	
Pay 25 percent of the costs allocated to general navigation features during construction.	0	
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction is partially reduced by a credit allowed for the value of lands, easements, rights of way, relocations. and dredged or excavated material disposal areas provided for commercial navigation.	708,000	
Total Non-Federal Costs	\$1,616,000	\$0

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and reimburse its share of construction costs over a period not to exceed thirty years.

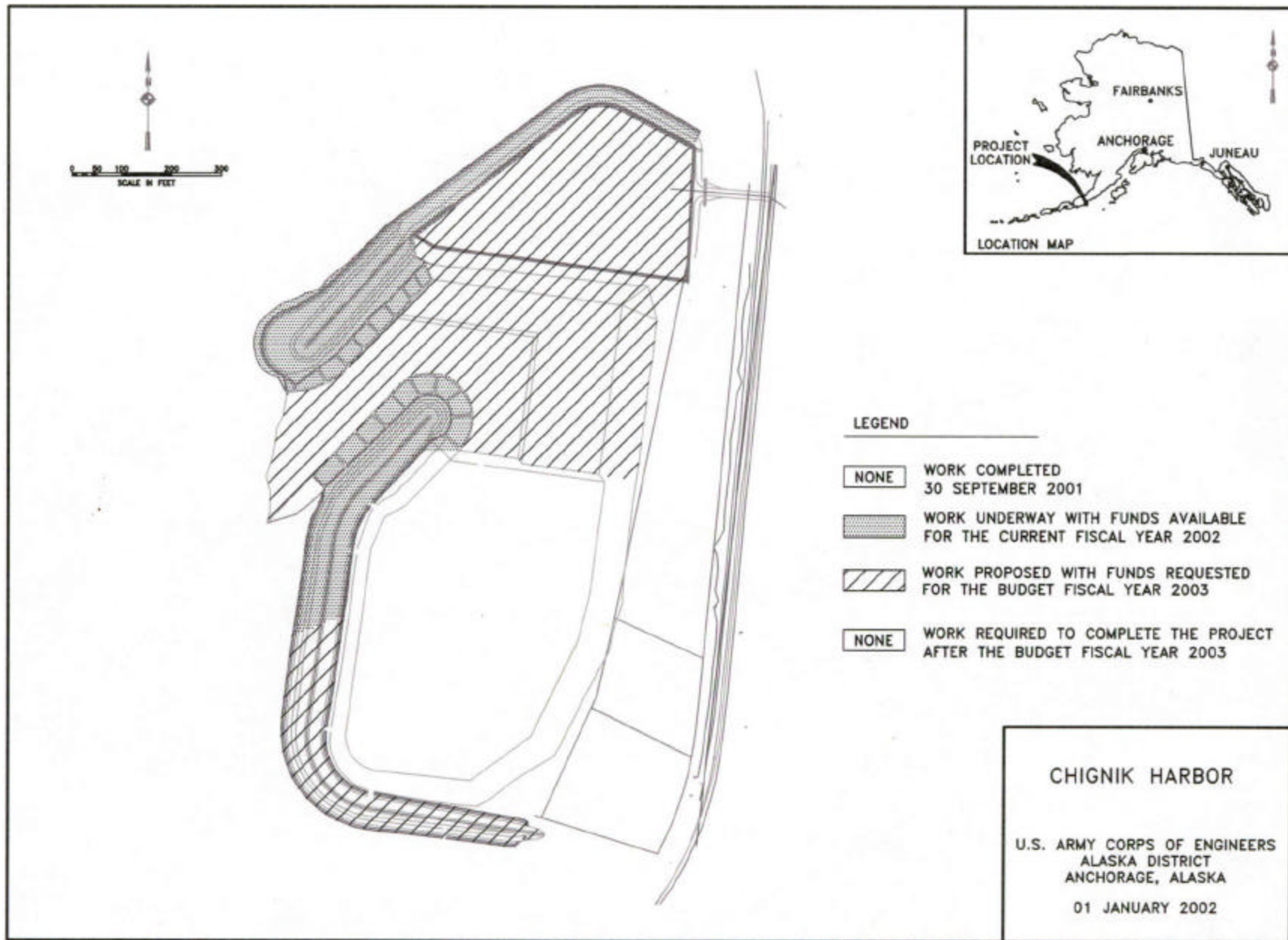
STATUS OF LOCAL COOPERATION: The City Council of Chignik, Alaska, has agreed to meet all requirements of local cooperation. The Project Cooperation Agreement was signed on 18 August 2000.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps of Engineers) Cost Estimate of \$7,272,000 is an increase of \$772,000 over the last estimate (\$ 6,500,000) presented to Congress in FY 2002 budget.

Item	Amount (\$)
Price Escalation on Construction Features	\$150,000
Schedule changes and additional environmental requirements	22,000
Post Contract Award and Other Estimating Adjustments	600,000
Total	\$772,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT AND COMPLIANCE WITH CLEAN WATER ACT: The final supplemental environmental impact statement was submitted to EPA in March 1996. The provisions of Section 404 of the Clean Water Act were met with the submission of the EIS including a Section 404 (b)(1) evaluation to Congress in July 1996.

OTHER INFORMATION: The construction contract was awarded in August 2001.



APPROPRIATION TITLE: Construction, General - Navigation - Channels and Harbors

PROJECT: Nome Harbor, Alaska (Continuing)

LOCATION: Nome is located on the southern coast of the Seward Peninsula in western Alaska. The city is approximately 863 km northwest of Anchorage and is the transport and commerce center for Northwest Alaska.

DESCRIPTION: The project consists of a new 1,070 meter-long entrance channel protected by a 910-meter long rubblemound breakwater and sediment collection basins. Extension of an existing causeway bridge to widen the tidal gap was added as a General Navigation Feature. The harbor would provide protected moorage for the existing 170 vessels as well as a fleet of 40 barges and transshipment vessels providing cargo service to the region.

AUTHORIZATION: Water Resource Development Act of 1999 as modified by PL 107-66, Energy and Water Development Appropriation for FY 2002.

REMAINING BENEFIT-REMAINING COST RATIO: 1.6 to 1.0 at 6-7/8 percent.

TOTAL BENEFIT-COST RATIO: The current benefit to cost ratio is 1.6 to 1.0 at 6-7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.6 to 1.0 at 6-7/8 percent (FY 2001).

BASIS OF BENEFIT-COST RATIO: Chief of Engineers Report of 8 June 1999 and an amendment on 2 August 1999 at October 1998 price levels.

SUMMARIZED FINANCIAL DATA:

		STATUS (1 Jan 02)	% Complete	Completion Schedule
Estimated Appropriation Requirement (CofE)	\$33,185,000	Entire Project	0	Sep 2006
Estimated Appropriation Requirement (U.S.C.G.)	10,000			Based on
Estimated Total Appropriation Requirement	\$33,195,000			Funding
Future Non-Fed Reimbursement	2,202,000			Availability
Estimated Federal Cost (Ultimate)	\$30,993,000			
Estimated Non-Fed Cost	8,553,000			
Cash Contributions	4,726,000			
Other	1,625,000			
Reimbursement	2,202,000			
Total Estimated Project	\$39,546,000			

SUMMARIZED FINANCIAL DATA: (Continued)

		Accmltd % est. FED cost	PHYSICAL DATA	Main
Allocations to 30 September 2001	\$759,000		Breakwater length	
Conference Allowance for FY 2002	2,200,000		Entrance Channel	
Allocations for FY 2002	500,000	1/	Width (m)	45.7 to 107
Allocations thru 2002	1,259,000	4%	Depth (m)	-3 to -6.7
Allocations requested for FY 2003	4,500,000	17%	Sediment bypass system (depth)	-6.7
Programmed Balance to Complete after FY 2003	\$27,426,000	100%	Dock approach channel (depth)	-6.7
Unprogrammed Balance to Complete after 2003	0			

1/ Reflects \$352,000 assigned as savings and slippage, and \$1,348,000 reprogrammed out of the project.

JUSTIFICATION: Nome, located on the Seward Peninsula in western Alaska, is a major transshipment point for Northwestern Alaska communities and is also port to a developing commercial crab and halibut fishery. Even under moderate seas, treacherous conditions can exist within the channel and entrance area due to the highly reflective sheet-pile lined channel, poor jetty configuration and inadequate channel depths. Barges and other vessels using the entrance area incur extensive damage when wave action causes them to impact the sheet-pile walls. Vessel impacts into the sheet pile have in turn necessitated millions of dollars worth of repairs approximately every decade. High dredging maintenance costs and potential toxic disposal problems also exist with the existing project.

FISCAL YEAR 2003: The requested amount of \$4,500,000 will be applied as follows:

Complete Breakwaters and Seawalls	4,200,000
Complete Engineering and Design	50,000
Complete Construction Management	250,000
Total	4,500,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Requirements of Local Cooperation Reimbursements Costs		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$1,625,000	
Pay 10 percent of the costs allocated to general navigation during construction.	3,227,000	
Pay 25 percent of the costs allocated to general navigation features during construction.	1,499,000	
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction is partially reduced by a credit allowed for the value of lands, easements, rights of way, relocations. and dredged or excavated material disposal areas provided for commercial navigation.	2,202,000	
Total Non-Federal Costs	\$8,553,000	\$0

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and reimburse its share of construction costs over a period not to exceed thirty years.

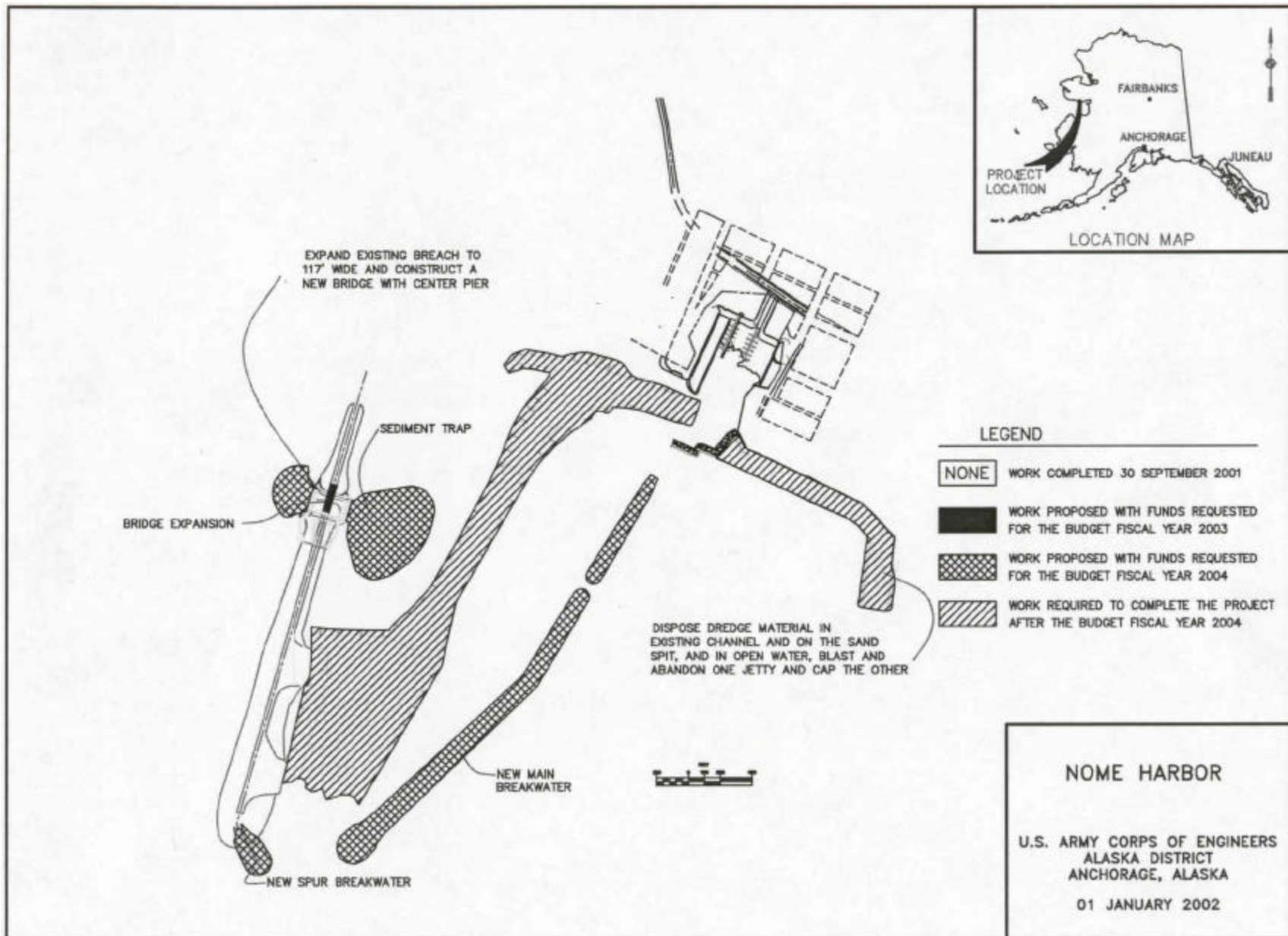
STATUS OF LOCAL COOPERATION: The City Council of Nome, Alaska, has agreed to meet all requirements of local cooperation. A Letter of Assurance was transmitted to the Corps of Engineers in June 1998. The city is preparing a financing plan for their portion of the required funds.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps of Engineers) Cost Estimate of \$33,541,000 is an increase of \$3,131,000 over the last estimate (\$30,054,000) presented to Congress (FY 2002 budget).

Item	Amount
Price Escalation on Construction Features	\$ 1,200,000
Design Changes	\$ 1,931,000
Total	\$ 3,131,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT AND COMPLIANCE WITH CLEAN WATER ACT: The FONSI was signed on 30 June 1998. The provisions of Section 404 of the Clean Water Act were met with the submission of the EIS including a Section 404 (b)(1) evaluation to Congress in June 1998.

OTHER INFORMATION: Initial planning funds (PED) were received in FY 1999 and initial construction funds in FY 2001. Local service facilities estimated to cost \$317,000 are also required for the project.



APPROPRIATION TITLE: Construction, General - Navigation - Channels and Harbors

PROJECT: Saint Paul Harbor, Alaska (Continuing)

LOCATION: Saint Paul is the northernmost of the Pribilof Islands, located in the southeastern Bering Sea approximately 800 air miles west southwest of Anchorage.

DESCRIPTION: The project consists of a dredged entrance channel at -32 feet MLLW, a maneuvering basin at -29 feet MLLW, a spending beach on the lee side of the existing detached breakwater, three offshore reefs parallel to the existing main breakwater, an environmental restoration feature to increase the flow of water into the Salt Lagoon and a small boat harbor with an entrance channel and maneuvering area dredged to a 20-foot depth and a small breakwater. The harbor improvements will accommodate increased boat and ship traffic and reduce damage to facilities and vessels from storm waves overtopping the existing main breakwater.

AUTHORIZATION: Water Resource Development Act of 1996 as modified by Section 303 of the Water Resources Development Act of 1999

REMAINING BENEFIT-REMAINING COST RATIO: 1.7 to 1.0 at 7-1/8 percent.

TOTAL BENEFIT-COST RATIO: The current benefit to cost ratio is 1.7 to 1.0 at 7-1/8 percent.

INITIAL BENEFIT-COST RATIO: 1.7 to 1.0 at 7-3/8 percent (FY 1998).

BASIS OF BENEFIT-COST RATIO: Chief of Engineers Report of 23 December 1996 at October 1996 price levels.

SUMMARIZED FINANCIAL DATA:

		STATUS (1 January 02)	Percent Complete	Completion Schedule
Estimated Appropriation Requirement (CofE)	\$ 35,704,000			
Estimated Appropriation Requirement (U.S. Coast Guard)	0	Entire Project	50	Sep 2005
Estimated Total Appropriation Requirement	35,704,000			Based on
Future Non-Fed Reimbursement	4,594,000			funding
Estimated Federal Cost (Ultimate)	31,110,000			availability
Estimated Non-Fed Cost	15,438,000			
Cash Contributions	\$10,789,000			
Other	55,000			
Reimbursement	4,594,000			
Total Estimated Project	\$46,548,000			

SUMMARIZED FINANCIAL DATA: (Continued)

		Accmltd & Est FED Cost	PHYSICAL DATA		
Allocations to 30 September 2001	\$12,214,000			Main	Detached
Conference Allowance for FY 2002	700,000		Breakwater Length (ft)	1,800	970
Allocations for FY 2002	9,808,000	1/	Entrance Channel		
Allocations thru 2002	22,022,000	62%	Width (ft)	150	
Allocations requested for FY 2003	5,880,000	78%	Depth (ft)	-32	
			Offshore Reefs		
			Length (ft)	1,250	
Programmed Balance to Complete after FY 2003	7,802,000	100%	Crest Elevation (ft)	-12	
			Maneuvering Basin		
Unprogrammed Balance to Complete after 2003	0		Total Area MLLW Depth	-29	
			Acres	11.0	

1/ Reflects \$112,000 assigned as savings and slippage, and \$ 9,220,000 reprogrammed into the project.

JUSTIFICATION: The city of Saint Paul is situated on the southwestern end of Saint Paul Island in the eastern Bering Sea. It is an active and growing island port whose economy is heavily dependent on commercial fishing. Storm waves overtopping and transmitting through the main breakwater create hazardous conditions and damage vessels and facilities in a harbor which serves a fishing fleet 3 times greater than designed. The maneuvering area is inadequate for the increased numbers of vessels that are much larger than the original design vessel and harbor operations have changed significantly since initial construction. The proposed improvements would provide reduction in storm wave damages, increased efficiencies in harbor operations, and increased economies in transporting processed product. The average annual navigation benefits attributable to the project are currently estimated at \$2,613,000.

FISCAL YEAR 2003: The requested amount of \$5,880,000 will be applied as follows:

Initiate Channels and Canals	5,500,000
Continue Engineering and Design	80,000
Continue Construction Management	300,000
Total	\$ 5,880,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Requirements of Local Cooperation		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$ 55,000	
Pay 10 percent of the costs allocated to general navigation features during construction.	\$ 600,000	
Pay 25 percent of the costs allocated to general navigation features during construction.	\$10,189,000	
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction is partially reduced by a credit allowed for the value of lands, easements, rights of way, relocations, and dredged or excavated material disposal areas provided for commercial navigation.	\$4,594,000	
Total Non-Federal Costs	\$15,438,000	\$ 0

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and reimburse its share of construction costs over a period not to exceed thirty years.

STATUS OF LOCAL COOPERATION: The City Council of St Paul, Alaska, has agreed to meet all requirements of local cooperation. The Project Cooperation Agreement was signed in November 1998. A amendment to the Project Cooperation Agreement will be executed in Fiscal Year 2003 to include the small boat harbor as modified by Section 303 of the Water Resources and Development Act of 1999.

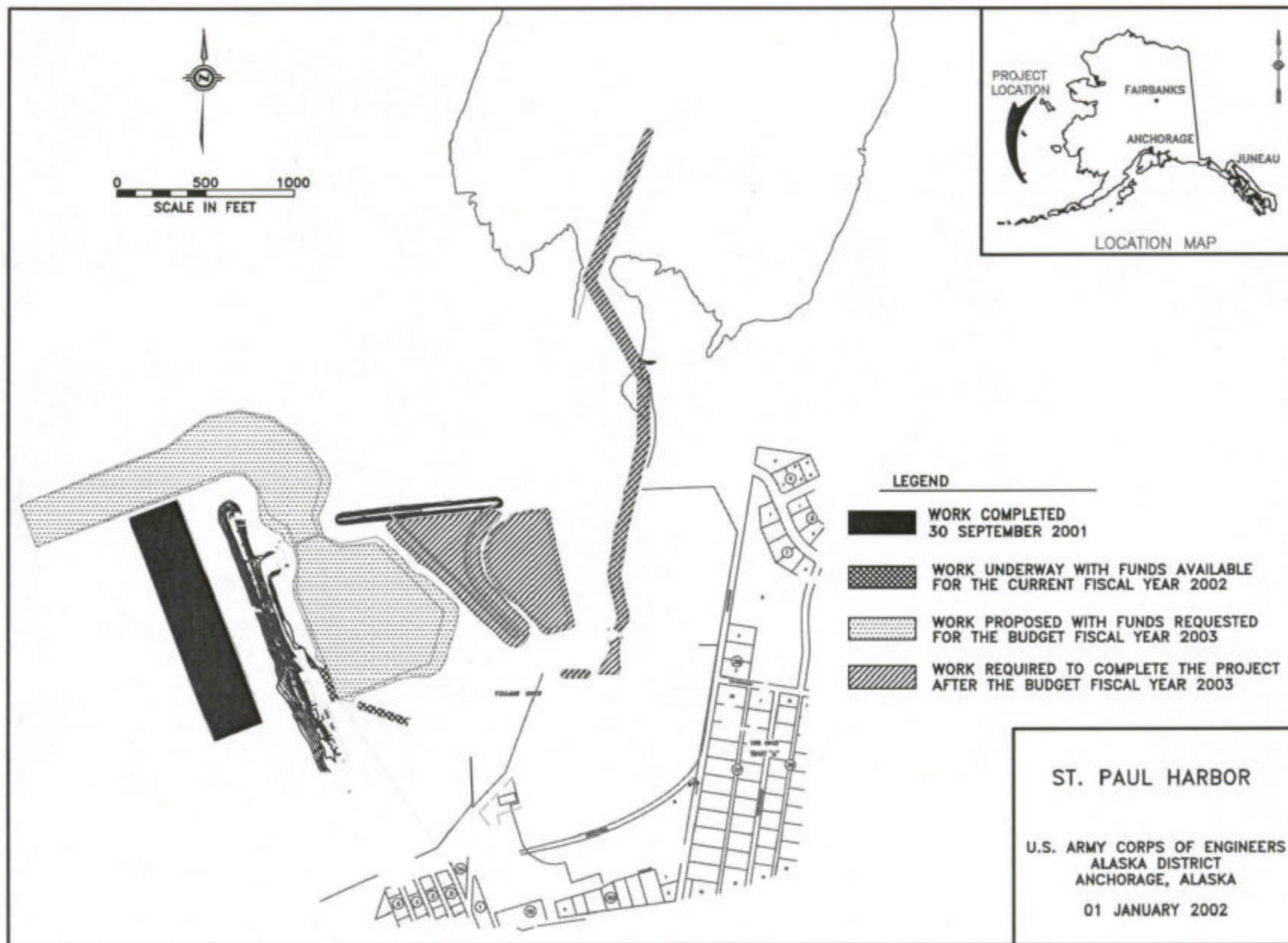
COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps of Engineers) Cost Estimate of \$35,704,000 is an increase of \$12,579,000 over the last estimate (\$23,125,000) presented to Congress (FY 2002 Budget).

Item	Amount
Price Escalation on Construction Features	200,000
Authorized Small Boat Harbor Modifications (WRDA 1999)	12,379,000
Total	12,579,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT AND COMPLIANCE WITH CLEAN WATER ACT:

- a. The FONSI was signed on 31 July 1996.
- b. The provisions of Section 404 of the Clean Water Act were met with the submission of the EA including a Section 404 (b)(1) evaluation to Congress in July 1996.

OTHER INFORMATION: Initial planning funds (PED) were received in FY 1996 and initial construction funds in FY 1998. Local service facilities estimated to cost \$8,844,000 are also required for the project.



APPROPRIATION TITLE: Construction, General - Navigation - Channels and Harbors

PROJECT: Wrangell Harbor Improvement, Alaska (Continuing)

LOCATION: Wrangell is located in southeast Alaska on the north shore of Wrangell Island, approximately 150 miles south of Juneau.

DESCRIPTION: The project consists of a 1,816 foot northwest rubblemound breakwater and a 535 foot western breakwater, and dredging a maneuvering area. The harbor would provide a 13.3 acre mooring basin for approximately 218 large commercial fishing vessels.

AUTHORIZATION: Water Resource Development Act of 1999.

REMAINING BENEFIT-REMAINING COST RATIO: 1.5 to 1.0 at 6-3/8 percent.

TOTAL BENEFIT-COST RATIO: The current benefit to cost ratio is 1.5 to 1.0 at 6-3/8 percent.

INITIAL BENEFIT-COST RATIO: 1.5 to 1.0 at 6-3/8 percent (FY 2002).

BASIS OF BENEFIT-COST RATIO: Feasibility Report of June 1999 at October 1998 price levels.

SUMMARIZED FINANCIAL DATA:

	STATUS (1 January 03)	Percent Complete	Completion Schedule
	Entire Project	0	Sep 06
Estimated Appropriation Requirement (CofE)	\$14,490,000		Based on funding availability
Estimated Appropriation Requirement (U.S. Coast Guard)	9,000		
Estimated Total Appropriation Requirement	14,499,000		
Future Non-Fed Reimbursement	1,594,000		
Estimated Federal Cost (Ultimate)	12,905,000		
Estimated Non-Fed Cost	3,220,000		
Cash Contributions	\$ 1,610,000		
Other	16,000		
Reimbursement	1,594,000		
Total Estimated Project	\$16,125,000		

SUMMARIZED FINANCIAL DATA (Continued)

ACCUMULATED

% OF EST. FED COST

Allocations to 30 September 2001	\$ 405,000		PHYSICAL DATA	Main
Conference Allowance for FY 2002	1,000,000		Breakwater Length (ft)	
Allocations for FY 2002	240,000	1/	Northwest	1,816
Allocations through 2002	645,000	5%	West	535
Allocation requested for FY 2003	5,000,000	39%	Entrance Channel	
Programmed Balance to Complete after 2003	8,845,000	100%		
Unprogrammed Balance to Complete after 2003	0		Width (ft)	120
			Depth (ft)	-18
			Mooring Area	
			Total Area MLLW Depth	-12
			Acres	13.3

1/ Reflects a reduction of \$160,000 assigned as savings and slippage and \$600,000 reprogrammed out of the project.

JUSTIFICATION: The city of Wrangell is situated in Southeast Alaska on Wrangell Island. It is an active and growing island port whose economy is heavily dependent on commercial fishing. The existing harbor was constructed in 1926. In recent years, the commercial fishing fleet has grown significantly and overcrowding has caused increased operating and maintenance costs and vessels are routinely turned away. Construction of a new harbor would alleviate problems identified at Wrangell by providing needed moorage and allowing a more efficient distribution of vessels in the existing facilities. The average annual navigation benefits attributable to the project are currently estimated at \$2,800,000.

FISCAL YEAR 2003: The requested amount of \$5,000,000 will be applied as follows:

Continue Breakwaters and Seawall	\$ 4,700,000
Continue Engineering and Design	20,000
Continue Construction Management	280,000
Total	\$ 5,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

	Payments During Construction And Reimbursements Costs	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Requirements of Local Cooperation		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$ 16,000	
Pay 10 percent of the costs allocated to deep draft navigation during construction.	\$1,610,000	
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction is partially reduced by a credit allowed for the value of lands, easements, rights of way, relocations, and dredged or excavated material disposal areas provided for commercial navigation.	\$1,594,000	
Total Non-Federal Costs	\$3,220,000	\$0

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and reimburse its share of construction costs over a period not to exceed thirty years.

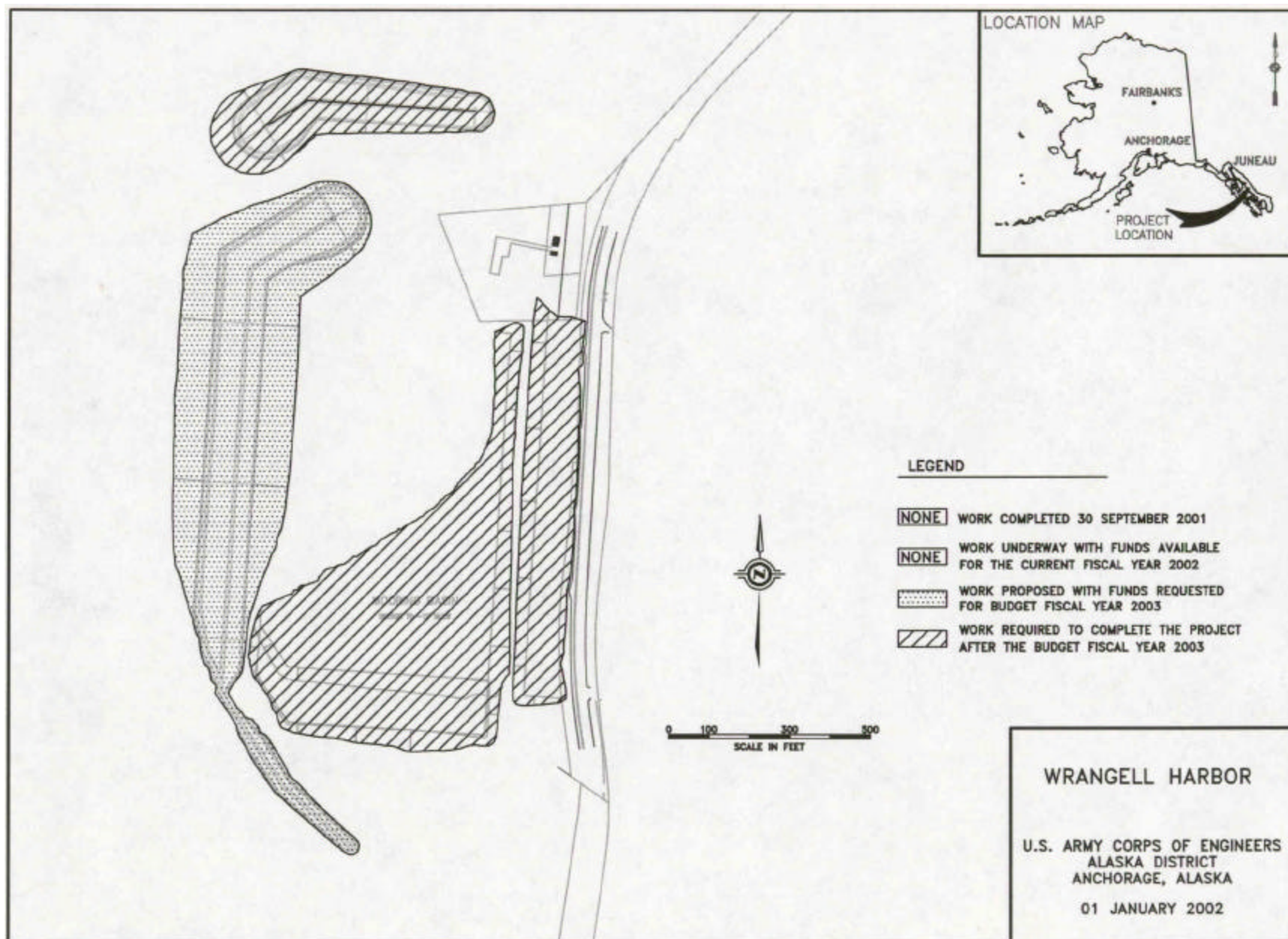
STATUS OF LOCAL COOPERATION: The City of Wrangell, Alaska, has agreed to meet all requirements of local cooperation and a Project Cooperation Agreement is schedule for execution in Fiscal Year 2003.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal Cost Estimate (Corps of Engineers) of \$14,490,000 is the initial estimate presented to Congress (FY 2003 Budget).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT AND COMPLIANCE WITH CLEAN WATER ACT:

- a. The final environmental assessment was submitted to EPA in August 1999.
- b. The provisions of Section 404 of the Clean Water Act were met with the submission of the EA including a Section 404 (b)(1) evaluation to Congress in July 1999.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1999. Initial construction funds were appropriated in FY 2002.



APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Kikiaola Small Boat Harbor, Kauai, Hawaii (Continuing)

LOCATION: Kikiaola Harbor is located on the southwest coast of the island of Kauai, approximately 1 mile southeast of Kekaha and approximately 2 miles west of Waimea.

DESCRIPTION: The recommended plan consists of improvements to an existing State-owned facility initially constructed by the State of Hawaii in 1959. The plan includes removal of 150 feet from an existing outer east stub breakwater, removal and reconstruction of an 85-foot long inner east stub breakwater, modification of 220 feet of the existing west breakwater, modification of 820 feet of the existing east breakwater, dredging a new 700-foot long entrance channel to a depth of 11 feet and varying in width from 105 to 205 feet and a 320-foot long access channel to a depth of 7 feet and varying in width from 70 to 105 feet. The plan of improvements will allow berthing for 45 vessels.

AUTHORIZATION: Section 101 of the Rivers and Harbors Act of 1968 (Public Law 90-483).

REMAINING BENEFIT-REMAINING COST RATIO: 5.1 to 1 at 3-1/4 percent.

INITIAL BENEFIT-COST RATIO: 2.7 TO 1 at 3-1/4 percent.

TOTAL BENEFIT-COST RATIO: 2.7 to 1 at 3-1/4 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are based on a General Reevaluation Report approved in December 1998 at October 1997 price levels.

SUMMARIZED FINANCIAL DATA		STATUS (1 JAN 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (CofE)	\$5,798,000	Entire Project	0	Sep 2003
Estimated Appropriation Requirement (USCG)	35,000			
Estimated Total Appropriation Requirement	\$5,833,000			Based on
Future Non-Federal Reimbursement	543,000			funding
				availability.
Estimated Federal Cost (Ultimate)	\$5,290,000			

SUMMARIZED FINANCIAL DATA (Continued)

PHYSICAL DATA

Estimated Non-Federal Cost	\$1,288,000		Entrance Channel:
Cash Contributions	\$ 644,000		Length - 700 feet
Other Costs	101,000		Width - 105 to 205 feet
Reimbursements	\$ 543,000		Depth - 11 feet
 Total Estimated Project Cost	 \$6,578,000		 Modified Breakwater:
		ACCUM	Length - 1,040 feet
		PCT OF EST	
		FED COST	
Allocations to 30 September 2001	\$1,384,000		New Breakwater:
Conference Allowance for FY 2002	1,275,000		Length - 85 feet
Allocation for FY 2002	111,000 <u>1/</u>		
Allocations through FY 2002	1,495,000	26	Access Channel:
Allocation Requested for FY 2003	4,303,000	100	Length - 320 feet
Programmed Balance to Complete after FY 2003	0		Width - 70 to 105 feet
Unprogrammed Balance to Complete after FY 2003	0		Depth - 7 feet

1/ Reflects \$204,000 reduction assigned as savings and slippage and \$960,000 reprogrammed to the St. Paul Harbor, Alaska project.

JUSTIFICATION: Vessels entering and leaving the existing State owned facility at Kikiaola Harbor continue to experience hazardous navigation conditions. The navigation problems at Kikiaola Harbor are directly attributed to the shallow depths in the entrance channel resulting in steep wave fronts and breaking wave conditions. In the past, numerous boats have sustained damages from the shallow depths and surge within the basin and channel. A recent survey of registered boaters on the island of Kauai revealed that about 35 percent of the respondents sustained damages averaging about \$700 per incident to their vessels at Kikiaola Harbor. The conditions at Kikiaola Harbor are also responsible for the present frequency of usage of the harbor. Despite its proximity to productive fishing grounds and its strategic location for commercial passenger boat operators, Kikiaola Harbor is underutilized. The proposed modifications to existing protective structures and dredging of a deeper and wider entrance and access channels will reduce surge and wave actions within the channel and basin. Survey responses show that the proposed plan of improvements will attract commercial fishermen and commercial passenger boat operators and result in increased usage of the harbor. These users will launch an estimated 1,500 additional boat trips a year from the modified harbor. The harbor, when fully developed, will have a berthing area of 0.7 acre with a maximum capacity of 45 vessels and provide a safe transit and haven for all vessels. The average annual navigational benefits attributable to the project are currently estimated at \$631,000.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Breakwater and Harbor Construction	\$3,841,000
Engineering and Design	41,000
Construction Management	421,000
Total	\$4,303,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction And Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Requirements of Local Cooperation		
Provide lands, easements, rights-of-way, and dredged material disposal areas.	\$ 101,000	
Pay 10 percent of the costs allocated to general navigation facilities during construction.	644,000	
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as partially reduced by a credit allowed for the value of lands, easements, rights-of-way, relocations, and dredged or excavated material disposal areas provided for commercial navigation.	543,000	
Total Non-Federal Costs	\$1,288,000	\$18,000

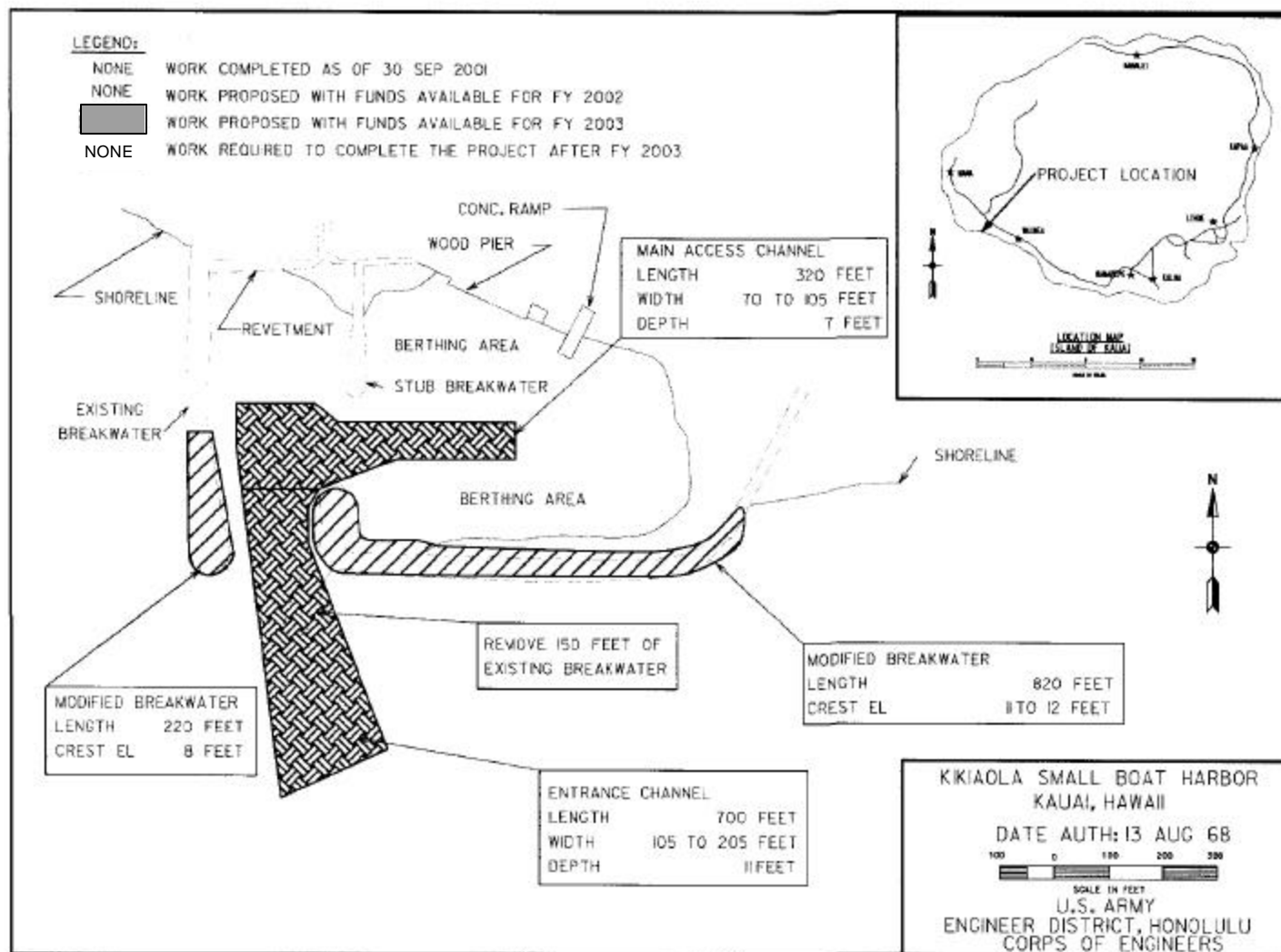
The non-Federal sponsor has agreed to make all required payments concurrently with project construction and reimburse its share of construction costs over a period of 30 years following completion of construction.

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the State of Hawaii. In May 1998, the State Department of Land and Natural Resources reaffirmed their willingness to share the total cost of project implementation. The project cooperation agreement is scheduled to be executed in fiscal year 2002. The State of Hawaii has requested that the State berthing area (a local service facility) be constructed in conjunction with the Federal project.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps of Engineers) cost estimate of \$5,798,000 is an increase of \$178,000 from the latest estimate (\$5,620,000) presented to Congress (FY 2001) is attributed to price escalation on construction features and increase in quantity of materials required for construction of breakwater.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment/Finding of No Significant Impact was signed on 3 June 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1994. The General Reevaluation Report was approved by HQUSACE in December 1998.



APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Maalaea Harbor, Maui, Hawaii (Continuing)

LOCATION: Maalaea Bay is situated on the southwest coast of Maui, approximately 7 miles south of Wailuku, the county seat of Maui, State of Hawaii.

DESCRIPTION: The authorized plan consists of improvements to an existing State-owned facility initially constructed by the State of Hawaii in 1952. The plan includes a 620-foot long extension of the south breakwater, a new 610-foot long, 150- to 180-foot wide, 12- to 15-foot deep entrance channel, a 1.7-acre and 12-foot deep turning basin and a 720-foot long, 80-foot wide and an 8-foot deep access channel. The improvements will allow an increase in berthing capacity from the existing 93 mooring spaces to a maximum capacity of 220 vessels.

AUTHORIZATION: Section 101 of the Rivers and Harbors Act of 1968 (Public Law 90-483) in accordance with provisions contained in House Document No. 353, 90th Congress, 2nd Session, dated July 8, 1968.

REMAINING BENEFIT-REMAINING COST RATIO: 7.43 to 1 at 3-1/4 percent.

TOTAL BENEFIT-COST RATIO: 5.03 to 1 at 3-1/4 percent.

INITIAL BENEFIT-COST RATIO: 5.6 to 1 at 3-1/4 percent (FY 1990). The benefit-cost ratio is based on the project functioning independently.

BASIS OF BENEFIT-COST RATIO: Benefits are based on a reevaluation completed in February 1996 at October 1995 price levels.

SUMMARIZED FINANCIAL DATA		STATUS (1 JAN 2002)	PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Appropriation Requirement (CofE)	\$11,884,000	Entire Project	0	March 2005
Estimated Appropriation Requirement (USCG)	20,000			Based on funding availability.
Estimated Total Appropriation Requirement	\$11,904,000			
Future Non-Federal Reimbursement	1,310,000			
Estimated Federal Cost (Ultimate)	\$10,594,000			

SUMMARIZED FINANCIAL DATA (Continued)

Estimated Non-Federal Cost	\$2,640,000
Cash Contributions	\$1,320,000
Other Costs	10,000
Reimbursements	\$1,310,000

Total Estimated Project Cost	\$13,234,000
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		ACCUM PCT OF EST FED COST
Allocations to 30 September 2001	\$3,983,000	
Conference Allowance for FY 2002	325,000	
Allocation for FY 2002	273,000 <u>1/</u>	
Allocations through FY 2002	4,256,000	36
Allocation Requested for FY 2003	2,262,000	55
Programmed Balance to Complete after 2003	5,366,000	
Unprogrammed Balance to Complete after 2003	0	

PHYSICAL DATA

Entrance Channel:
 Length - 610 feet
 Width - 150 to 180 feet
 Depth - 12 to 15 feet

Turning Basin:
 Area - 1.7 acres
 Depth - 12 feet

Breakwater Extension
 Length - 620 feet

Access Channel:
 Length - 720 feet
 Width - 80 feet
 Depth - 8 feet

1/ Reflects \$52,000 reduction assigned as savings and slippage.

JUSTIFICATION: Vessels moored in the existing State-owned facility at Maalaea Harbor have experienced surge and wave action from ocean swells generated by storms occurring in the southern hemisphere. The existing entrance channel is open to southerly swells and storm waves that directly enter the harbor basin causing damages to the vessels moored inside. The surge action renders much of the harbor basin unusable for safe mooring of vessels. The enlargement, deepening and the relocation of the entrance channel and extension of the existing south breakwater would reduce surge and wave action within the basin. These improvements would also increase the usable harbor basin area allowing Maui District boaters currently awaiting slips at Maalaea to safely wet-store their vessels at the harbor and provide safer navigation conditions for vessels using the facility. The harbor, when fully developed, would have a basin area of 13.5 acres with a maximum capacity of approximately 220 boats. Annual benefits for the project are summarized below:

Annual Benefits	Amount
Damage Reduction	\$ 326,000
Commercial Fishing	96,000
Commercial Navigation	1,985,000
Total	\$2,407,000

FISCAL YEAR 2003: The requested amount will be applied as follows:

Initiate Breakwater Construction	\$1,551,000
Initiate Harbor Dredging	425,000
Engineering and Design	74,000
Construction Management	212,000
Total	\$2,262,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Requirements of Local Cooperation		
Provide lands, easements, rights-of-way, and dredged material disposal areas.	\$ 10,000	
Pay 10 percent of the costs allocated to general navigation facilities during construction.	1,320,000	
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as partially reduced by a credit allowed for the value of lands, easements, rights-of-way, relocations, and dredged or excavated material disposal areas provided for commercial navigation.	1,310,000	
Total Non-Federal Costs	\$2,640,000	\$0

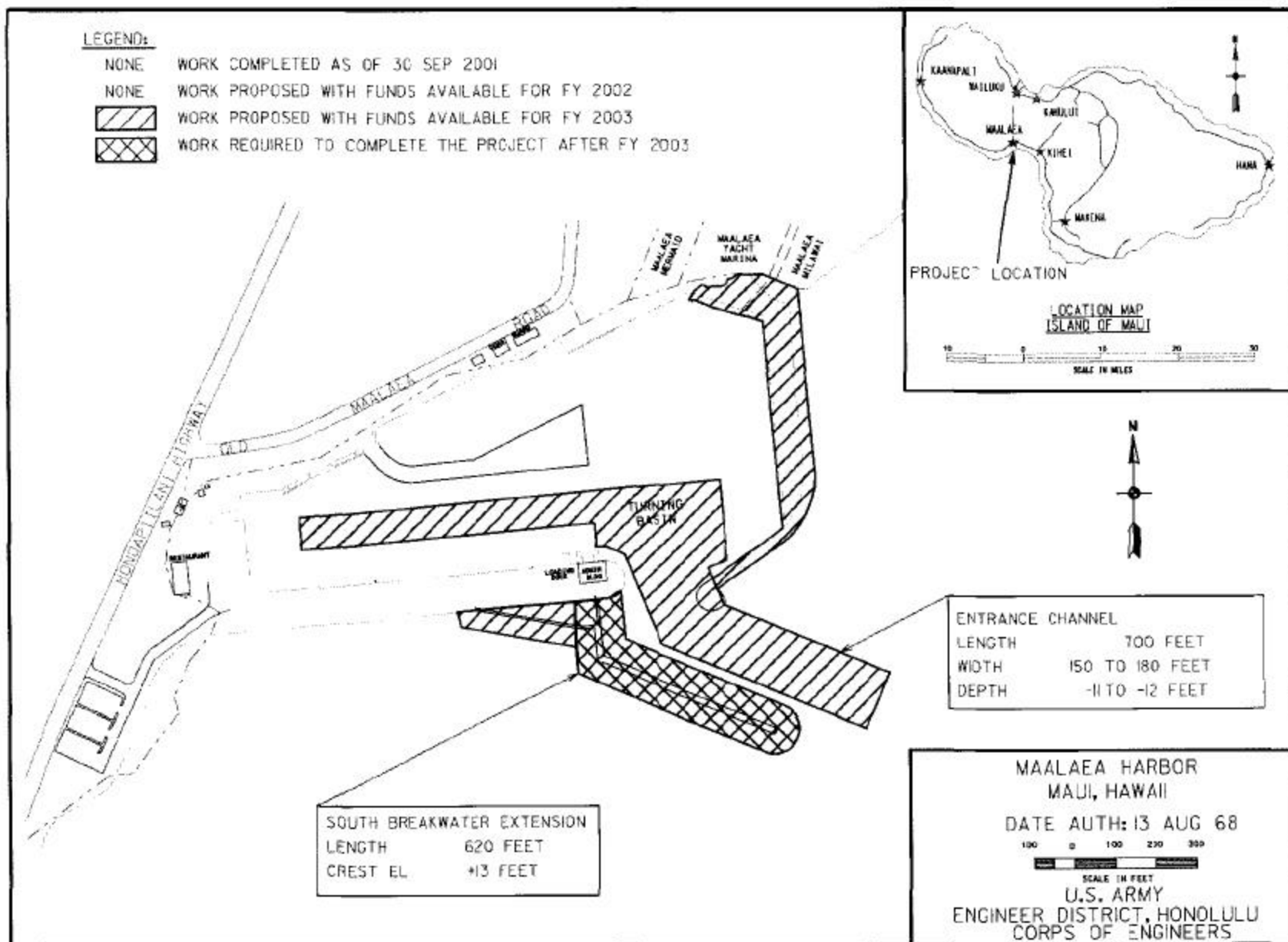
The non-Federal sponsor has agreed to make all required payments concurrently with project construction and reimburse its share of construction costs over a period of 30 years following completion of construction.

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the State of Hawaii. The entire local share of the project first costs was appropriated by the State of Hawaii Legislature. The funds will be provided prior to the construction award.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps of Engineers) cost estimate of \$11,884,000 is an increase of \$1,000 from the last estimate (\$11,883,000) presented to Congress (FY 2001). This change is due to an adjustment in the Federal/non-Federal cost sharing.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS was filed with the EPA on April 28, 1980. A supplement to the EIS was completed in July 1994. The draft second supplement to the EIS was completed and circulated May 1998. Numerous public and agency comments and concerns were received regarding the project's impacts on coral reef and surfing resources. These concerns are currently being addressed and include an independent review of alternatives and physical model studies to evaluate the impacts of alternative project features on surfing sites and navigability.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1979. Funds to initiate construction were appropriated in FY 1990. Model studies completed in December 2001 provided information on all alternatives and impacts on the Maalaea Pipeline surfing site.



APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Iao Stream Flood Control Project, Maui, Hawaii (Continuing Deficiency Correction)

LOCATION: The project is located in Wailuku, Maui County, Hawaii.

DESCRIPTION: Project consists of deficiency correction by structural modifications to correct erosion problems associated with the federally constructed single purpose Iao Stream Flood Control Project completed in May 1981.

AUTHORIZATION: Section 203 of the Flood Control Act of 1968 (PL 90-483).

REMAINING BENEFIT-REMAINING COST RATIO: 1.3 to 1 at 6-3/8 percent (Deficiency Correction Only).

TOTAL BENEFIT-COST RATIO: 1.2 to 1 at 6-3/8 percent (Deficiency Correction Only).

INITIAL BENEFIT-COST RATIO: 1.4 to 1 at 6-1/8 percent (1977)

BASIS OF BENEFIT-COST RATIO: Benefits are based on a Modifications to Completed Project Report dated March 1995 at October 1994 price levels.

SUMMARIZED FINANCIAL DATA		STATUS (1 JAN 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Original Project		Original Project	100	May 1981
		Remedial Work	0	Sen 2005
Actual Federal Cost	\$12,285,000			Based on
Actual Non-Federal Cost	274,262			funding
Other Costs	\$274,262			availability.
Total Original Project Cost	\$12,559,262			
Remedial Work		PHYSICAL DATA		
Estimated Federal Cost	\$15,394,000	Concrete Channel Lining		7,000 ft.
Estimated Non-Federal Cost	5,131,000			
Cash Contributions	\$4,508,000			
Other Costs	623,000			
Total Estimated Remedial Cost	\$20,525,000			
Total Estimated Project Cost	\$33,084,262			

SUMMARIZED FINANCIAL DATA: (Continued)

ACCUM
PCT OF EST
FED COST

Allocations to 30 September 2001	\$13,509,000	1/	
Conference Allowance for FY 2002	400,000		
Allocation for FY 2002	336,000	2/	
Allocations through FY 2002	13,845,000		50
Allocation Requested for FY 2003	419,000		52
Programmed Balance to Complete after FY 2003	13,415,000		
Unprogrammed Balance to Complete after FY 2003	0		

1/ Reflects \$12,285,000 allocated to original project.

2/ Reflects \$64,000 reduction assigned as savings and slippage.

JUSTIFICATION: The Iao Stream Flood Control Project was designed to protect the town of Wailuku from destructive floods by channelizing the high velocity floodwaters into the Pacific Ocean. The project was designed for a standard project flood protection with a peak design discharge of 27,500 cfs. The completed project consists of a debris basin located 2.5 miles upstream from the stream mouth, channel improvements extending 3,500 feet downstream from the debris basin, levees along the right bank and floodplain management along the left bank for 6,950 feet of natural stream, and stream realignment with channel improvements for a reach of 1,730 feet which extends to the downstream limit of the project located near the shoreline. Storms occurring in March 1990 which approximated the 10-year flood event (6,000 cfs), caused extensive erosion to the toes of the levee system. Under existing damaged conditions, the occurrence of the design discharge will result in failure of the levee system and extensive flooding. To correct this problem and to eliminate levee failure, protective works are required to prevent damages to adjacent floodplain property and to preserve the integrity of the existing structures. The proposed measure in the Modification to Completed Project Report dated 28 March 1995 consists of replacement of the levee reaches of the project with a 7,000 ft. concrete channel. A physical model of the existing drop structure determined that there are no technical deficiencies with the drop structure as previously suspected. An additional alternative recommended by a Value Engineering Study Team and the Corps Committee on Channel Stabilization is also being evaluated in the Project Design Memorandum to address environmental concerns. Annual benefits for flood damage reduction are \$1,450,000.

FISCAL YEAR 2003: The requested amount of \$419,000 will be used for Engineering and Design.

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected by Section 103 in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

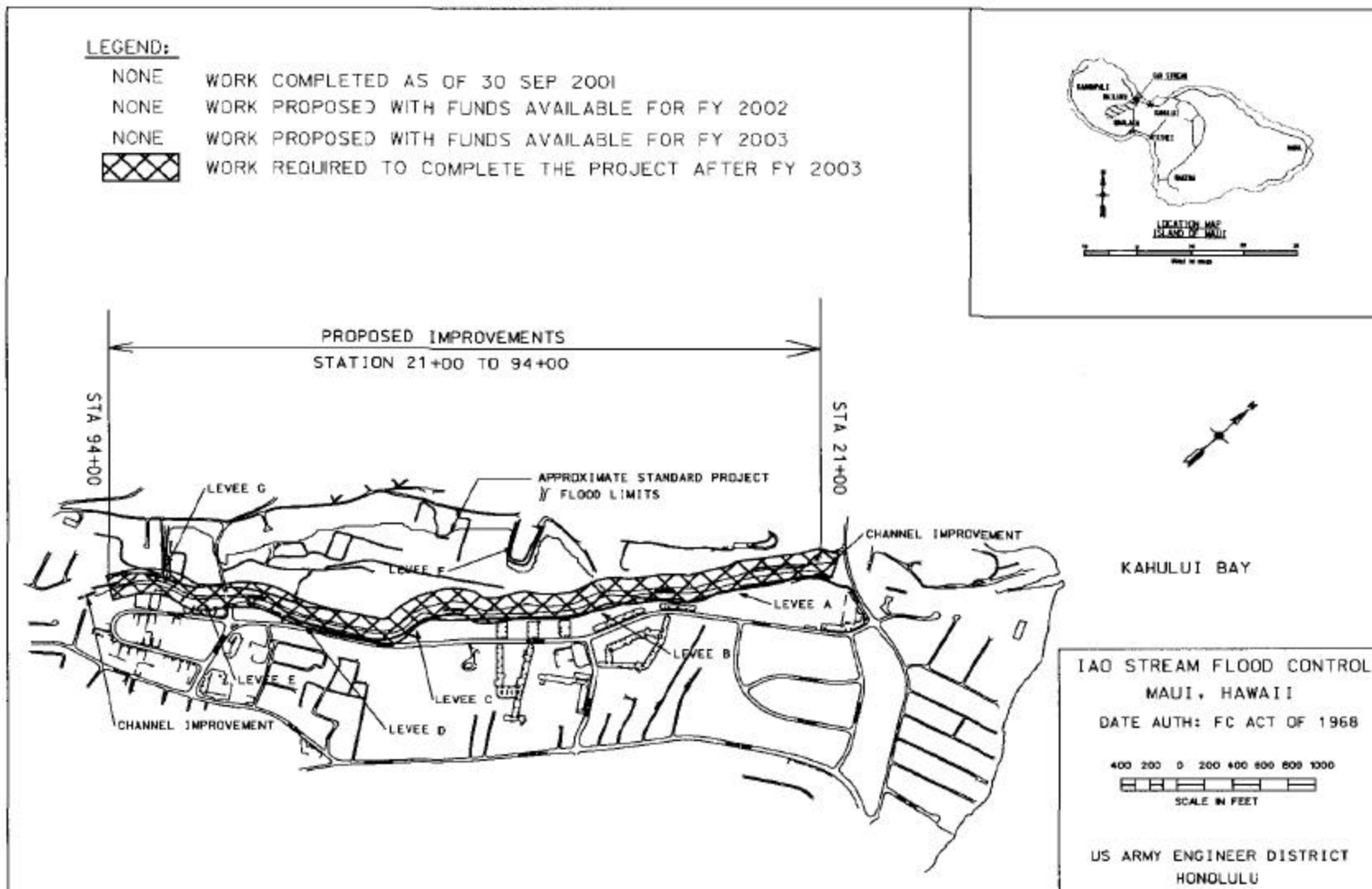
	Payments During Construction And Reimbursements	Annual Operation Maintenance Repair, Rehabilitation and Replacement Costs
Requirements of Local Cooperation		
Provide lands, easements, rights-of-way, and disposal areas.	\$623,000	
Pay 25 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, and replacement of flood control facilities.	4,508,000	\$10,000
Total Non-Federal Costs	\$5,131,000	\$10,000
The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.		

STATUS OF LOCAL COOPERATION: The existing operating project was completed in May 1981 and has been properly maintained by the County of Maui, the local sponsor. The local sponsor supports the project and is willing and capable of furnishing the local cooperation requirements based on a letter dated 14 March 1995 from the Mayor of Maui County.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate for deficiency correction of \$15,394,000 is an increase of \$390,000 from the latest estimate (\$15,004,000) presented to Congress (FY 2001). This increase is attributed to price escalation on construction features.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS for the original project was filed with the Council on Environmental Quality in September 1975. An environmental assessment is expected to be sufficient for the various plans of improvement and will be prepared during fiscal year 2002.

OTHER INFORMATION: A Modification to Completed Project Report was approved by HQUSACE on 8 December 1995.



PACIFIC OCEAN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and maintenance, General, FY 2003

STATE		OBLIGATIONS		REASON FOR CHANGE AND MAJOR MAINTENANCE ITEMS
Project Name		Estimated FY 2002 (\$)	Estimated FY 2003 (\$)	
	Total		Total	
	(Operations)		(Operations)	1. Reasons for change in Operations from FY 2002 to FY 2003 (10% +/-)
	(Maintenance)		(Maintenance)	2. Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000)

1. NAVIGATION

a. Channels and Harbors. The program request of \$6,224,000 provides for operations and maintenance of channels and harbor projects. Annual requirements are for operation and maintenance of project facilities; and labor, supplies and materials.

Alaska				
Anchorage Harbor	1,753,000	3,616,000		
	(0)	(110,000)		1. Shoaling study
	(1,753,000)	(3,506,000)		2. Annual dredging of the Port of Anchorage; Qty increase
Bar Pt. Harbor (Ketchikan)	160,000	500,000		
	(0)	(0)		1. None
	(160,000)	(500,000)		2. None
Cook Inlet Shoals	2,145,000	0		
	(0)	(0)		1. None
	(2,145,000)	(0)		2. None

PACIFIC OCEAN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and maintenance, General, FY 2003

STATE		OBLIGATIONS		REASON FOR CHANGE AND MAJOR MAINTENANCE ITEMS
Project Name		Estimated FY 2002 (\$)	Estimated FY 2003 (\$)	
	Total		Total	
	(Operations)		(Operations)	1. Reasons for change in Operations from FY 2002 to FY 2003 (10% +/-)
	(Maintenance)		(Maintenance)	2. Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000)
<hr/>				
1. NAVIGATION (Cont.)				
Dillingham Small Boat Harbor	425,000	459,000		
	(0)	(0)		1. None
	(425,000)	(459,000)		2. None
Homer Harbor	181,000	363,000		
	(0)	(125,000)		1. Prepare DMMP
	(181,000)	(238,000)		2. None
Ninilchik Harbor	173,000	232,000		
	(0)	(0)		1. None
	(173,000)	(232,000)		2. None
Nome Harbor	1,458,000	410,000		
	(0)	(0)		1. None
	(1,458,000)	(410,000)		2. None
Naknek River	0	215,000		
	(0)	(0)		1. None
	(0)	(215,000)		2. None
Saint Paul Harbor	0	75,000		
	(0)	(0)		1. None
	(0)	(75,000)		2. None

PACIFIC OCEAN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and maintenance, General, FY 2003

STATE		OBLIGATIONS		REASON FOR CHANGE AND MAJOR MAINTENANCE ITEMS
Project Name		Estimated FY 2002 (\$)	Estimated FY 2003 (\$)	
	Total		Total	
	(Operations)		(Operations)	1. Reasons for change in Operations from FY 2002 to FY 2003 (10% +/-)
	(Maintenance)		(Maintenance)	2. Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000)

1. NAVIGATION (Cont.)

HAWAII				
Barbers Point Harbor	332,000	354,000		
	(124,000)	(154,000)		1. Leases operational maintenance contracts due to facility upgrade
	(208,000)	(200,000)		2. Upgrade displays and infrastructure
TOTAL - NAVIGATION	6,627,000	6,224,000		
	(124,000)	(389,000)		
	(6,503,000)	(5,835,000)		

PACIFIC OCEAN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and maintenance, General, FY 2003

STATE	OBLIGATIONS		
Project Name	Estimated FY 2002 (\$)	Estimated FY 2003 (\$)	REASON FOR CHANGE AND MAJOR MAINTENANCE ITEMS
	Total	Total	
	(Operations)	(Operations)	1. Reasons for change in Operations from FY 2002 to FY 2003 (10% +/-)
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000)

2. FLOOD CONTROL

a. Reservoirs:

The program request of \$2,889,000 provides for the operation and maintenance of one flood control reservoir in Alaska. Annual requirements are for operation and ordinary maintenance of project facilities; labor, supplies, materials, and parts required for daily functions; and periodic maintenance, repairs, and replacements.

ALASKA

Chena River Lakes	1,659,000	2,889,000	
	(1,311,000)	(1,264,000)	1. None
	(348,000)	(1,625,000)	2. Resurface half of Laurance Road (only access to project)

TOTAL - Reservoirs	1,659,000	2,889,000
	(1,311,000)	(1,264,000)
	(348,000)	(1,625,000)

PACIFIC OCEAN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and maintenance, General, FY 2003

STATE	OBLIGATIONS		REASON FOR CHANGE AND MAJOR MAINTENANCE ITEMS
Project Name	Estimated FY 2002 (\$)	Estimated FY 2003 (\$)	
	Total (Operations)	Total (Operations)	1. Reasons for change in Operations from FY 2002 to FY 2003 (10% +/-)
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000)

b. Channel Improvements, Inspection and Miscellaneous. The program request of \$315,000 provides for salaries and the annual inspection of flood control projects, shore protection projects and navigation breakwaters.

ALASKA

Inspection of Completed Works	12,000	40,000	
	(12,000)	(40,000)	1. Inspection at 13 sites (2 additional from FY 2002)
	(0)	(0)	2. None

HAWAII

Inspection of Completed works	122,000	275,000	
	(122,000)	(275,000)	1. Conduct additional survey; develop O&M manuals
	(0)	(0)	2. None

Total Channel Improvements	134,000	315,000	
Inspection and Misc.	(134,000)	(315,000)	
	(0)	(0)	

TOTAL - FLOOD CONTROL	1,793,000	3,204,000	
	(1,445,000)	(1,579,000)	
	(348,000)	(1,625,000)	

3. MULTIPLE PURPOSE POWER PROJECTS: None

PACIFIC OCEAN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and maintenance, General, FY 2003

STATE	OBLIGATIONS		REASON FOR CHANGE AND MAJOR MAINTENANCE ITEMS
Project Name	Estimated FY 2002 (\$)	Estimated FY 2003 (\$)	
	Total (Operations)	Total (Operations)	1. Reasons for change in Operations from FY 2002 to FY 2003 (10% +/-)
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000)

4. PROTECTION OF NAVIGATION

a. Inspection of Completed Works. The program request of \$1,087,000 provides for conducting project condition surveys of harbors where maintenance is not scheduled in the budget year and also to conduct an ocean disposal site study to assess the environmental impact of dredged material disposal.

ALASKA

Project Condition Surveys	509,000	543,000	
	(509,000)	(543,000)	1. None
	(0)	(0)	2. None

HAWAII

Project Condition Surveys	491,000	544,000	
	(491,000)	(544,000)	1. Completion of dredge study
	(0)	(0)	2. None

TOTAL - PROTECTION OF NAVIGATION	1,000,000	1,087,000	
	(1,000,000)	(1,087,000)	
	(0)	(0)	

GRAND TOTAL - PACIFIC OCEAN DIVISION

	9,420,000	10,515,000
	(2,569,000)	(3,055,000)
	(6,851,000)	(7,460,000)

PACIFIC OCEAN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and maintenance, General, FY 2003

STATE		OBLIGATIONS		REASON FOR CHANGE AND MAJOR MAINTENANCE ITEMS
Project Name	Estimated FY 2002 (\$)	Estimated FY 2003 (\$)		
	Total (Operations)	Total (Operations)		1. Reasons for change in Operations from FY 2002 to FY 2003 (10% +/-)
	(Maintenance)	(Maintenance)		2. Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000)